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THE MICHIGAN FARMER.

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CONTENTS.

Agricultural.

Grand River Valley.....	129
Morgan Horses.....	131
Top Dressing Wheat—Guano as Manure.....	133
Propagating Fish.....	135
The Apiary—No. 3.....	135
Grand Traverse Country.....	136
Varieties of Indian Corn.....	137
Fat Oxen—Their Keeping.....	138
Opinions of a Practical Farmer.....	138
What do you live for.....	138
Draughting—Its Good Effects.....	139
Potato Raising.....	139
To make Whitewash that will not rub off.....	139
Stable Floors—Earth or Bank.....	140
To increase the quantity of Cream.....	140
Poland Oats.....	140
The Alleged Error in Premiums.....	140
Report of the Committee on Essays.....	141
Response to the Challenge.....	142
Pests of the Farm.....	143
Warf Standard Trees for Prairie Culture.....	144
Stump Machines.....	144
Quercy—Disease in Cattle.....	144
Messenger Stock.....	145
The New Vegetable.....	145

Horticultural.

Winter Apples.....	148
Dahlia.....	148
Grafting and Budding.....	149
Fruit Prospects.....	149
Shrubbery and Flowers.....	149
To prevent Apples from being Wormy.....	149
A few facts for Consideration.....	150

Household.

Dick Sherwood, es. Woman.....	150
Home in the West.....	151
Where should Wives and Mothers seek Happiness.....	151
Economy in House-keeping.....	152
Enigmas.....	153

Editorial.

Fattening Stock.....	153
The Crops and the Season.....	154
The New Counties.....	154
Editorial Notices.....	155
Markets.....	156

Grand River Valley.

FRIEND JOHNSTONE,—As I am about leaving this fertile Valley, with its pleasant plains and rich hard timbered lands, and the beautiful pineries adjacent, I wish through the *Farmer* to bid our many friends, with whom I have spent the winter pleasantly indeed, a cordial good-bye for the present. Also, for the information of the readers of the *Farmer* generally, and to induce those in the older settled portions of Michigan and other States, who have few acres of mother earth, or none at all, in particular, I will endeavour to condense a few remarks on the general features of this valley and contiguous counties, and their advantages, present and prospective. The general features of this portion of country, commencing with Grand River where it leaves Jackson county, keeping in the general course of the line betwixt Ingham and Eaton counties, crossing and re-crossing, sometimes in one and again in the other, is rather level, no bluffs or banks to the river of any consequence, and very few abrupt hillocks, but gently rising swells or ridges, with beautiful valleys of the richest soil between. Timber variable. Oak intermixed with beech prevails, especially on the ridges; sometimes terminating in openings of oak, and that not plenty. But the valleys and large areas of level ground abound with variety; sometimes sugar maple prevailing, and again basswood, red and rock elm, white and blue ash, and an occasional black walnut, intermixed with many other kinds. As the river approaches the corner of Clinton county, the face of the country grows more rough and abrupt, and the water obtains a swifter current. Thus it continues until below Grand Rapids. Much of the way the bluffs are timbered with oak and some other timbers; but in some places the hills are nearly naked. Occasionally there is a strip of intervals of the richest mould, black sand and muck, from one half to three quarters of a mile wide; and sometimes extending along the margin of the river for miles. Instance the south side opposite Ionia. A few miles below Grand Rapids the bluffs pretty much disappear,

and the face of the country on either side is level enough to please the eye; gently undulating into swells and valleys, timbered with the most admirable variety that eye need wish to behold; now an extensive swell thickly set with sugar maple, rock elm, &c., with here and there scattered over the whole surface, an occasional pine, and again a clump of the most beautiful pines. Anon, we find ourself traveling over a most delightful plateau, on which pine prevails, intermixed with oak, and sometimes beech and other timbers; and, again, one is in a valley where there is no pine, but sugar maple, rock elm and basswood prevail, mixed with other trees. This captivating scenery must be seen to be correctly appreciated. But, not to be tedious, I remark that the description given of the country below the Rapids is applicable to a large majority of the region lying between Grand and Muskegon Rivers, south line of town 9 north, line of Ionia county running west to Ottawa county line, thence south to Allegan County. And the same general features and timbers prevail after getting a few miles north of the Muskegon in Newago county, thence extending north to Manistee county, as some one testifies in the *Grand Haven Times*. Of the general features of these Grand River counties, I will add that Eaton is generally level and heavily timbered. Clay and loam prevailing in the soil, it is a good county for raising both wheat and stock. I found plenty of most excellent timothy hay, and it is now (April 9th) to be bought at six to eight dollars the ton, and no complaint of scarcity. The south half, or more, of Barry county is quite uneven; much of it abrupt and broken. Oak is the prevailing timber, but hickory is present; and the soil produces abundant crops of wheat and clover. The north portion of Barry is more even; and, for alluvial soil, the valley of the Thorn Apple is not probably surpassed in Michigan. That portion of Kent county south of Grand River embraces probably every variety of soil found in the State, from the most light sand to the most heavy timbered muck, and black sand, and loam; generally even faced enough; but the towns of Cascade and Lowell are mostly uneven, and portions very abrupt. The north of Kent is embraced in that plateau of earth betwixt the Grand and Muskegon Rivers. Ionia county, south of the River, is mostly heavy timbered, and sufficiently level. I noticed here, and in the north of Barry and north-west of Eaton, that yellow poplar, commonly called white wood, was present, and occasionally in great abundance. The north tier of towns in Ionia county, commencing at the east line, is mostly a contiguous plateau of burr oak plains and small prairies, nearly to the west line of the county, where this grade of land is interrupted by the broken lands of Flat River. Clinton county, as a whole, in point of evenness, of unsurpassed beauty and variety of timber,

absence of swamp lands, and beautiful rills and brooks of limpid water, is probably the banner county; but in actual fertility of soil it does not take the pre-eminence, but it is full average. This entire region of country is settled, and being settled, with the right kind of people. *Go-a-head-a-tiveness* is evidently the prominent organ. Lansing, aside from the public expenditures, exhibits a spirit of private enterprise to be emulated. Dewitt, in Clinton county, Charlotte, in Eaton county, and Hastings, in Barry county, are all flourishing shire towns, that have no occasion to be ashamed of their improvements, considering the newness of the country and the much territory yet unsettled. Grand Rapids, the great commercial mart of this region, is improving and beautifying in a manner probably unprecedented in Michigan. Lowell, at the mouth of Flat River, exhibits a spirit of enterprise not met with in north-western Michigan, except at St. Johns, in Clinton county, which will doubtless eventually be the shire town. This humming, bustling, new village has sprung up right in the dense forest, on the line of the Detroit and Milwaukie Railroad, within two years, (I was told about eighteen months,) and now has in full operation two or more large steam mills, propelling saws, lath mill, shingle machines, turning lathes, &c. There are several well filled stores, a land office, and two or more public houses, and mechanics of the various crafts, who showed in their countenances cheerfulness and determined enterprise. Ionia, (shire town,) is a pleasant little village nestled in under the hills, (north bank of Grand River,) but does not exhibit the spirit of advancement manifested by the village of Lyons some ten miles above. This flourishing town appears destined by nature and enterprise to become a commercial mart for a large scope of surrounding country. About ten miles north-east of Lyons, at the junction of Fish Creek and Maple River is the flourishing village of Mather-ton; this would be to me one of the inviting spots were I a mechanic looking for a location. I would be glad if I could, and I did intend to speak individually of many of our farmer friends and their farms, but the length of this article forbids. Permit me to say in conclusion, for the benefit of those wishing to obtain locations for homes, that having had some experience of western climate, and not an inferior acquaintance with the western country to the Wisconsin River, I can honestly recommend this region to have as many (I think more) advantages, present and prospective, as any part of the west; and I think it foolish to spend time and money to move to western Wisconsin or Iowa, and leave behind just as good soil and climate, and more privileges than can be had there. For the benefit of enquirers I will add that there is little or no government land in Barry, Eaton, Clinton, Gratiot, or Ionia counties but there is plenty of unsettled land in all

those counties, at from \$3 to \$12 per acre. There is some Government land in Montcalm, the north tier of towns in Kent, and some scattering pieces to be had in Ottawa county, at 75 cts. per acre to actual settlers. But the desirable Government lands just at present, are to be found in Newago, Mecosta, Oceana, and Mason counties. But procrastination is the thief of time; now is the time of choice to become an actual settler by next July, at 75 cts. per acre, or pay from \$3 to \$5 per acre one year or eighteen months hence. I had something to say of the improvements in Newago county, but on account of the length of this article, must pass it by; simply stating there are two flourishing villages (viz.) Newago and Croton, at both of which there are mills for flouring, and sawing is done on a large scale. But I purpose to speak of this county at some future time.

J. A. BALDWIN.

Morgan Horses.

EDITOR MICHIGAN FARMER:—Some of my good friends in your State have called my attention to several articles in your journal in relation to Morgan Horses, involving a discussion of the respective merits of "Green Mountain Black Hawk," owned by Messrs. Smith and Crippen, of Coldwater, and a Messenger horse, "Abdallah Chief."

As to this last controversy, I have nothing to say. I leave that in the hands of the owners of "Green Mountain Black Hawk," who seem abundantly capable of conducting it.

But it is in relation to the wholesale sneer of the owners of "Abdallah Chief" against the race of Morgan horses, as well as the superlatively ridiculous article quoted by them from the N. Y. *Spirit of the Times*, that I propose at this time to speak.

In the article in your paper signed "Abdallah Chief," the writer asks, with apparent complacency, "what Morgan ever made a respectable show of time inside of two-forty?" He evidently deems this an unanswerable question, and a final blow to all the pretensions of the Morgan horse. "Unhappy man!"

"Now mark how plain a table shall write you down."

"BLACK HAWK" was purchased by the writer, of Benjamin Thurston, Esq., of Lowell, Mass., in 1844, when eleven years old. Previous to that time he had appeared repeatedly upon the track, and in reply to the correspondent of the *Spirit of the Times*, who asks what "Black Hawk" has ever done at trotting compared with some other stallions, it is sufficient to say that he went fast enough to beat anything that ever dared to enter the list against him, not only at mile heats, but five mile heats. He repeatedly won large stakes, and was never beaten either by Messenger horses, or any other.

In 1847, I published some time before the N. Y. State Fair, that I would meet any entire horse in America at the fair for a trial of speed for the Championship. This publication was made in the Albany papers, and circulated far and wide long before the fair. What was the result? But one single horse had the courage to enter against "Black Hawk." Where were the celebrated Messengers, that are so superior to Morgans, at this time? Where the "Andrew Jacksons," and "Kemble Jacksons," and "Long Island Black Hawks?" *Nowhere.* The horse, "Morse's Grey," which trotted against BLACK HAWK at that time was laboriously fitted and trained for the contest, while BLACK HAWK was taken to Saratoga immediately after the close of a severe season of service, and was quite lame on the day of the trial, owing to the imprudence of a farrier in shoeing, yet with all this odds he beat his competitor in three straight heats.

Since that time he has never been upon the track against competitors, having left to his progeny the task of perpetuating and confirming the laurels he had already won.

I will now instance a few of the numerous horses of his progeny who have acquired fame for themselves and their sire upon the track.

Ethan Allen who made, when less than four years old, 2.36, in harness, upon Long Island, and made time at Boston National Show, 2.34; Know Nothing, who made, when five years old, May 11, 1855, Cambridge Park, 2.27; Black Ralph, 2.30 Saratoga Track; Belle of Saratoga, in harness, 2.29; Lady Lichfield, 2.33, in harness; Black Hawk Maid, 2.33, harness; "Sherman Black Hawk," a stallion, 2.36, in harness; Ticonderoga, stallion, 2.39; Lady Sherman, Providence, R. I., 2.38, in harness; Prince Albert, 2.36; Red Leg, 2.40; Cleopatra, 2.42; Nelly, 2.40; Lone Star, stallion, 2.40; Henry Clay, 2.45; Flying Cloud, stallion, 2.48; Plato, four years old, stallion, 2.50, Rutland Track; Black Hawk Chief, 2.48, National Show, Boston; Sherman Belle, 2.50. To this might be added a list of three year old colts, which have made a half mile, repeatedly, in 1.25, and mention be made of the remarkable colt, Don Juan, who made, when two years old, in the spring of 1855, upon Lake Champlain, a half mile in 1.28.

It is believed that the time of these two and three year old colts have never been equalled, and it is distinctly asserted that the time of Ethan Allen when not quite four years old, 2.36, and of Know Nothing when five years old, 2.27, has never been approached by any other horses of similar ages, of Messenger breed, or any other race upon the continent.

But the correspondent of the *Spirit of the Times* declares Ethan Allen not to be a Morgan or Black Hawk colt, and says he heard a gentleman offer to wager \$500 that he could prove it.

We clip from that sterling agricultural journal, the *Boston Cultivator* the following editorial in relation to this matter:

The story that Flying Morgan is the sire of Ethan Allen is false; we have evidence in our possession which will satisfy all right-minded persons on that point, and they are welcome to examine it. In the mean time we give the following note from the owners of Ethan Allen:

Editors of the *Boston Cultivator*:—We have repeatedly stated in public and in private, that the sire of Ethan Allen was Vermont Black Hawk. We now offer the following proposition: When two or more responsible men shall deny our statement, OVER THEIR PROPER NAMES, we will agree to the appointment of a committee to investigate the matter, who shall report the facts for publication; and if their report substantiates our statement, the opposing party shall pay two HUNDRED DOLLARS to defray the expenses attending the investigation; and should they decide that Flying Morgan was the sire of Ethan Allen, we will pay that sum for the same purpose. We suggest that in case a committee is appointed, it consist of three persons, and that they be named by the President of The Vermont State Agricultural Society, as both Black Hawk and Flying Morgan are owned in that State, and Ethan Allen was there begotten.

O. S. ROX & Co.

Boston, Jan. 21, 1856.

We think the gentleman who offered a wager of \$500 that he could prove Ethan Allen to be other than of Black Hawk parentage, can have an opportunity of investing his money.

In the spring of 1855, Ethan Allen's owner published in the *Spirit of the Times* a challenge to match any entire horse in America. Where were the Messengers again? Where, again, the list of horses whose "merits have not been overrated," and which are so superior to Morgan Black Hawks? Echo alone answers—"where?" Not a solitary horse, be he Messenger or otherwise, dare enter the list against this Black Hawk young stallion. How ridiculously foolish then this boasting of the superiority of Messengers. When challenged, and invited to show "it upon the track, they are found wanting, and hide themselves in a fulsome badinage of braggadocio through some favorite newspaper.

Know Nothing has also, we learn, published a challenge to match for \$10,000 any horse, mare, or gelding in the United States, his owner to name the race. Here is an opportunity for the exhibition of Messenger stock, "who can beat the Morgans at all distances, upon the turf or road."

The dam of Know Nothing is now upon my premises.

In relation to the estimation in which Black Hawk's progeny are held by the people, I subjoin an article also-clipped from the *Boston Cultivator*:

"In an editorial article in the *Boston Cultivator* of March 5th, 1853, it is stated that according to a list in the hands of the editors, there have been sold, of the progeny of Black Hawk, from the town of Bridport alone, thirty-eight animals and an interest in the

thirty-ninth to the amount of one-half, for the sum of \$22,737, or an average of \$599 and a fraction each.

I have a list which shows that since the publication of the article alluded to, there have been made from the town of Bridport alone, actual sales of eleven animals of this stock, a portion of them mares and geldings, which have brought the sum of \$17,185, or an average of \$1,562 and a fraction each.

Such statements may seem almost incredible at first, but the reason of the high prices of this stock may be found in the following facts:—they have undisputed excellence of blood, great style, endurance and speed.

It is stated, in the letter copied from the *Spirit*, that the extreme weight of Morgan stock is from 850 pounds to 950 pounds. BLACK HAWK weighs, when in good condition, 1024 pounds, and a very large proportion of his progeny are as large, or larger, than their sire. That they are of "lofty crest," "promptly stepping, and stylish," is conceded by the owners of Abdallah Chief. That they have gone, and can go again, a long ways inside of 2.40, we have shown by the record above. That but a solitary stallion dared to meet old BLACK HAWK when publicly challenged in 1847 is notorious, whether of boasted Messenger blood, or of any other. That not one of the very modestly praised horses or their stock, named by the article in the *Spirit*, dares to meet Ethan Allen, has been also shewn.

And in closing it may be said, that the friends of old "BLACK HAWK," who although twenty-three years old is yet vigorous as when entering his teens, will match the Messenger horses in any numbers, from one to fifty; they will trot with them for the palm of victory, for any purse from \$1000 to \$10,000, they will meet them upon any track of a suitable character in the United States, by having public and timely notice. Whether it be one horse of the Black Hawk stock against one of Messenger stock, or fifty of each race, we are ready and anxious at any and all proper times to apply the test upon the turf, between the two races.

Let the Messengers come forward and show their vaunted superiority. They have now an auspicious opportunity.

In relation to "Green Mountain Black Hawk," from what I saw of his performance before he left Vermont, I think the reputation of his race will be safe with him in Michigan, whether matched against Abdallah or otherwise.

It is proper to state that I believe that the people of the west have been frequently imposed upon by the owners of horses who called them of Black Hawk parentage, when the facts were otherwise.

They need not be thus deceived, for they can learn the truth in all such cases by writing to this place.

The constantly increasing demand for the stock throughout the great West, is an evidence that it is properly appreciated there, while the fact that the

services of old BLACK HAWK readily commands \$100 the season, show how the stock is valued in Vermont.

Any further information in relation to BLACK HAWK or his stock, will be cheerfully given on being written to at this place.

DAVID HILL.

Bridport, Addison Co., Vt., March 22, 1856.

Top Dressing Wheat—Guano as a Manure, &c.

EDITOR FARMER:—The season is now fast approaching for spring harrowing, and top dressing the wheat crop. Many neglect these important processes altogether, and allow the crop to *take care of itself*, but others think and act differently, and are amply repaid for their outlay.

It is certainly good management to break up the crust on the surface of the soil, and to admit the atmosphere to the young roots of the wheat plant, and if in addition to this treatment, suitable manure is applied, in the shape of top dressing, a very great improvement in the crop will soon be visible.

The application of plaster as a spring manure for wheat, has been frequently tried with success. Yet in many cases it has not produced much effect, and sometimes it has evidently *delayed* the ripening of the crop, and caused it to suffer from rust and mildew. This latter circumstance plainly shows, that, if plaster is to be used, it ought to be applied in the autumn or *very early* in the spring. The composition of gypsum or plaster, is as follows. One hundred pounds weight of it consists of

Sulphuric acid,	40 lbs.,
Lime,	33 lbs.,
Water,	21 lbs.

100

On soils which contain all the necessary ingredients for the growth of wheat, *except sulphate of lime*, plaster will have a very beneficial effect, but if a sufficient quantity of sulphate of lime already exists in the soil, the application of plaster will be perfectly useless; on this account the value of plaster as a manure, has sometimes been underrated by persons who did not understand the cause of its failure.

I have lately seen an interesting report of experiments tried by the members of an Agricultural club at Haddington, Scotland. The subject of discussion at the meeting of the Club in February, 1856, was, "Experiments in top dressing wheat with artificial manures," and the chairman, Mr. S. Sheriff, of Saltcoats, opened the proceedings by saying, that the great revolution in Agriculture commenced with Guano; he well remembered the first time it was applied on his late father's farm. He had procured a ton of guano at a cost of twenty-five pounds; its effects were so great, that although he was a strong "protectionist," he exclaimed: "give me guano at eight pounds per ton, and we may have free trade to-morrow;" well, they had free trade, they had guano at a reasonable price, and was agriculture ever more prosperous?

He was certain that nothing would astonish one not conversant with agriculture, more than a statement of the immense sums annually expended by Scotch farmers in artificial manures. When he stated that on a farm of 600 Scotch acres, a sum of above £1200 is annually spent in these manures, *with considerable profit*, he certainly did not exaggerate. Mr. Sheriff, after stating that the value of a manure can only be ascertained by repeated experiments, submitted an account of his investigations to the meeting.

He divided a wheat field into six lots of one acre each.

No. 1, got no manure,

No. 2, two cwts. of nitrate of soda,

No. 3, two cwts. sulphate of ammonia,

No. 4, three cwts. of Peruvian guano,

No. 5, two cwts. sulphate of ammonia, and one cwt. common salt,

No. 6, one cwt. guano, one cwt. nitrate of soda, one cwt. sulphate of ammonia.

The field in which the experiments were made, was sown with wheat in the month of March, after turnips had been taken off the ground. The turnips were manured with twenty-five cart loads of dung, and four cwts. guano per scotch acre. The wheat was drilled at the rate of three bushels per acre, and dressed and hoed during May. The appearance of the crops during summer, was as follows:

No. 6, the mixture of sulphate, nitrate, and guano, appeared the most bulky, and No. 5, the sulphate and salt stood *conspicuous* when the heavy rains had laid all the others, and therefore appeared less bulky; but the result proved otherwise, *as the salt added to the weight of the straw, as well as to the quantity and quality of the grain*. The results on the whole, were unfavorable to top dressing, with the exception of No. 4, (the guano) which has left a clean profit of £1 per acre, *notwithstanding the unfavorable season*.

From the strength of the wheat crop generally, many who had extensively top-dressed for years, allowed that this was the *first year* it had failed to remunerate them, and it would have been better, had they kept their money in their pockets. These experiments prove the superiority of good guano. Sulphate of ammonia, when applied alone, is evidently of little use, but when mixed with salt it is certainly of great benefit, and this may be attributed to salt having the power of fixing the ammonia.

According to these experiments, the only manure which leaves a profit is three cwt. of guano; this leaves £1 0s 5½d, all the others showing a loss.

Another feature is, that one cwt. of common salt, applied with two cwts. of sulphate of ammonia, gave a difference of £1 9s 7½d over two cwts. sulphate of ammonia alone. This result was no doubt owing to the greater stiffness produced in the straw, as the weight was greatest where the salt was applied. The

action of common salt is very remarkable, and well deserves the attention of the farmers of Michigan.

Mr. Sadler gave the result of an experiment made in 1854, which shows a difference of five bushels of grain and two cwt. of straw, from 2½ cwt. guano, contrasted with one cwt. of nitrate of soda.

Mr. Scott Skirving, of Crampton, stated from experience, that he found *guano the most profitable of the portable manures for top dressing.*

From the motion unanimously agreed to, embracing this view, it may be presumed that guano is generally preferred as a top dressing, by the farmers of the county of Haddington.

Mr. Sadler experimented with guano as a manure for potatoes, and found that the effect of the phosphate of lime, and the phosphoric acid of the guano had a striking effect on the potato crop, five cwt. of guano alone, increasing the crop almost fifty per cent. over twelve tons of farm yard manure, and one hundred cwt. and one-fourth of nitrate of soda; which latter contrasted with farm-yard dung, gives almost no result: thus showing that nitrate of soda is comparatively useless when applied to the potato crop.

One point which the Haddington experiments have established is, that, as a top dressing for wheat, and a manure for the potato crop, guano stands unrivalled.

Every wheat grower should make experiments on a small portion of his crop; by this means the comparative value of guano, plaster, wood-ashes, nitrate of soda, farm-yard dung &c., could be easily ascertained.

When the farmers of Scotland, who in some cases, pay twenty dollars an acre rent for their land, can afford to use artificial manures, and find them profitable, surely the farmers of Michigan, *who own the land themselves*, ought to try every method of improving it.

There is no doubt but that the produce of wheat crop in the United States, might be wonderfully increased by spring harrowing, top dressing, and rolling.

By harrowing at a proper time, and in a proper manner, the crust on the surface of the soil is broken up, the seeds of weeds torn up and killed, and the larva of injurious insects exposed to destruction. By harrowing too, the soil is loosened around the young roots of the wheat plant, the atmosphere is permitted to penetrate the earth, and the field is fitted to receive clover and grass seeds. Artificial manures can be applied with very good effect after harrowing. Rolling finishes the process of spring tillage, by means of it, lumps are broken and pulverized, fissures stopped, and the soil, being rendered fine and level, is better adapted to afford nourishment to the plants, to resist the action of heat, and

to present an even surface to the cradle, or reaping machine.

The drags, or harrows in ordinary use, are not adapted for harrowing wheat in spring, they are too heavy, for this purpose a much lighter implement should be used, with numerous short teeth, or pins.

A brush harrow may sometimes be used with good effect, it will in most cases, be sufficient to break up the crust of the soil, and to fit it for the reception of seed or manure.

Several kinds of manure, are within the reach of the farmers of Michigan, and trials of their comparative value can be easily made. Plaster and shell marl abound in this State; guano, nitrate of soda, wood-ashes, &c., are easily procured and should get a trial; the wheat fields of Michigan are very much in want of such fertilizers.

In using guano it should be mixed with a considerable quantity of ashes, dry muck, or any other rich substance that will give it bulk; it should be well pulverized, thoroughly mixed, and then carefully spread by the hand or the machine.

Shell marl well dried and powdered is an excellent substance to mix with guano, so also are salt and plaster.

Salt will give strength and stiffness to the straw, and enable it to sustain the additional weight of head, caused by the application of guano.

I have recently seen by an European paper, that the Venezuelan Consuls have announced, that, the Guano Islands of that Republic, in the Caribbean sea, are transferred to an American Association, called "The Philadelphia Guano Company." Merchants are cautioned against sending vessels to these Islands without a permit from this Association.

The New York papers of April 3d, report the departure of the steamship Tennessee, for St. Thomas, Porto Cabello, and Laguayra, with \$270,000 in gold, \$50,000 of which was shipped by the "Philadelphia Guano Company," to the government of Venezuela; being the first instalment on account of a contract made with said government for the *exclusive right* to remove the valuable deposits of guano, on the islands in the Caribbean sea, under the jurisdiction of Venezuela.

As the deposits of guano will soon be exhausted, the farmers of Michigan should endeavor to avail themselves of this valuable manure, as soon as they possibly can, and if the Venezuelan guano is of good quality, the Philadelphia Company, will very likely, enrich themselves and confer a benefit on agriculture by their speculation.

At all events, the farmers of the United States, should not allow this valuable manure to be exported for the benefit of Europeans, while their own fields *stand very much in need of such a powerful fertilizer.*

E. MASON.

On Propagating Fish.

MR. EDITOR:—I find thirty-three varieties of fish in our great lakes and rivers, and I hope that some of our enterprising citizens of this State will turn their attention to propagating some of them; for there are a number of these varieties that could be propagated to advantage in some of our small lakes, rivers and ponds. Any one who has a spring or small creek, could construct artificial ponds by damming or embankments, and the ponds thus formed might be stocked with fish, which would be a great pleasure and luxury and even profit. One great object in selecting varieties of fish to propagate from would be to select those which do not devour their own species. Some of them are very voracious and would soon depopulate a pond if left with other fish less voracious than themselves. Live fish of almost any kind could be transported a long distance by putting them in boxes or tubs with holes in them, placed in or about a steam boat wheel house, in such a position that the water from the wheel would continually run in and out of the box or tub.

I will tell you how any one with very little ingenuity trouble or expense, could stock a small clear pond or creek with those small, pretty little delicious fish, the spotted brook trout. There is an abundance of these little fish to be caught in and about the rapids at the Sault St. Mary's. Catch and put them in tubs or boxes as before stated, and when you take them from the boat, place a cask of water above the fish, in such a position that the water will continually run into the vessel that contains the fish. Some kinds of fish could be propagated by procuring the fish eggs in spawning time, and by placing the eggs in water, imitating nature as much as possible in procuring the spawn; they might be transported to almost any distance, with proper care. Yours, G. CLARK.

Ecoute, Wayne Co., Feb. 1856.

The Apiary No. 3.

It is supposed the queen that is to produce the eggs, which are to make the swarms for the following year, is impregnated in the month of August; this takes place in the air. The queen, having been preceded by the drones, rises aloft in the air, describing large circles, until she is lost sight of. After this takes place, the drones come to a violent death at the hands of the workers. Others contend that the queen is impregnated soon after a new colony is settled. The number of eggs fertilized by a single coupling is enormous. Huber calculates that the queen lays 12,000 eggs in two months, and Reamer at the rate of 200 per day. From the indiscriminate slaughter of the drones or males during the summer months, we are to infer that the ova, although impregnated, is retarded during the cold months, and only a few deposited to keep up the requisite num-

ber in the hive. Bees have the power of generating a degree of heat within the hive much greater than the atmosphere. Mr. Hunter found in July, when the temperature of the atmosphere was 54°, the interior of the hive was 82°; and in December 35° and the hive 73°.

Bees have a great aversion to wet weather, but it is not certain that it is so much the rain they dread, as it is the degree of light which prevents them from venturing abroad; they possess large and complex organs of sight, and when clouds suddenly gather in the sky, they hurry back in great numbers to the hive. Some well informed apiarians maintain that the bee cannot discern an object less than about two feet distant from the hive, but can discover them from two feet to a mile or more. It is quite likely that they can see within the hive where nearly darkness prevails. The collection of farina or pollen of flowers is an object of industry with the bees, it is this of which the bee-bread is formed for the food of the larvae; and a stock for the next spring's use must be gathered nearly a year in advance. They do not collect the pollen indiscriminately from all flowers within their reach, but each bee collects from a single variety of flowers; hence the color of the pollen may, and does, vary as the different bees collect it; and in no case does the pollen collected by any one bee consist of different colors. When a bee, laden with pollen, arrives at the hive, she generally walks or stands upon the comb, beating her wings; this calls to her assistance three or four of her fellows, who lighten her of her load, the pollen is deposited in the bottom of the cell, where it is kneaded into paste, with which they are filled, this is called the bee-bread. Besides honey and pollen they gather a substance called propolis; this is used in finishing comb and stopping out cold, wet, and any crevice through which an enemy might enter. Bees do not take honey indiscriminately from all flowers; they by instinct are taught that the nectar of some flowers is poison. Some flowers yield a nectar innocuous to the bee, but poisonous to many. This is what Xenophon calls "intoxicating honey," and seriously affected some of his Greek soldiers. The nectar of flowers is swallowed by the bees and passes into the crop, a kind of reservoir, where it undergoes a kind of elaboration by which it is converted into honey. Some contend that it takes some time to undergo this process, others that it is made into honey by the time the bees get to the hive with it and ready to deposit. When the season for rearing the larva for new colonies is over, then the business of collecting honey begins, and continues through the season, unless they sooner fill all the comb. Young bees are reared in small numbers during the entire season, and in the winter; were it not so, the hive would be depopulated, for the workers seldom live over five or six months, and we cannot suppose

they all begin existence at the same time. Bees are an insect of peculiar cleanliness and retain their digestive powers during cold weather. They subsist on the labors of the summer, and take advantage of warm days to fly out and void their excrements, and when confined in the hive have been known to die rather than defile it. They commence early in the spring to rid the hive of dead bees and filth, and are ready to begin their labors on the appearance of the first blossoms.

Grand Traverse Country.

EDITOR MICHIGAN FARMER, DEAR SIR:—Although not personally acquainted with you, it is some time since I formed an acquaintance with the *Farmer* in Lenawee county, and during my sojourn at Grand Rapids it was one of the necessities which we considered indispensable. Since we have settled in Grand Traverse, it has continued to make its monthly appearance, giving us good advice and experience on many different subjects; and now, as a trifling pledge of friendship to it, I send you a club of five, with a fair prospect of doubling it next year, and thus continue the ratio for several years to come. I have only to give it an introduction to a sensible man, when he exclaims, "yes sir, I want it to be my counsellor." Some other friends we had, that used to call upon us, if not monthly, at least quite often, which we are not particularly anxious should renew their calls in this, our new home. I mean friends Ague, Chill, and Billious, and as a consequence Blue-Pill, Quinine and Emetic, which, if they were not friends, used to stand by, ready to give us a lift, over the left, perhaps.

In the February number of the *Farmer*, I notice some inquiries from J. Pennington, about the country around Grand Traverse Bay. Now as the Bay country is somewhat extensive, there being about 150 miles of shore to it, there is, therefore, a large amount of country bordering on the bay. I will answer some of his inquiries as to the country in the vicinity of this place, hoping that Dr. Schetterly, or some other one will answer for the other points.

Elk Rapids, the name of our village, is situated on the east side of the East Bay (you will see by referring to Farmer's Map of Michigan, that it is divided into the East and West Bay by a peninsula,) twenty miles from the head, on both sides of the Elk River, which is the outlet of Elk Lake, Round Lake, Torch Lake, Clam Lake, Grass Lake, and Intermediate Lake, extending back into the country some fifty miles. The country bordering upon these Lakes is timbered land of a good quality for farming purposes, watered by spring brooks, upon which there is an abundance of hydraulic power. Two saw mills are in process of erection on these small streams. Our village contains 300 inhabitants, and will probably be the county

site of a new county to be formed out of Grand Traverse and Antrim counties.

In answer to Mr. Pennington's first inquiry, I would say Government land is to be had on the East side of the Bay, but upon the Peninsula and the West side it is not in the market at present, being reserved for the Indians, but we understand it will be brought into market this season; the price, seventy-five cents per acre to settlers, (speculators are not wanted) for 160 acres; all over that, \$1.25 per acre.

Second, the weather is not any colder than in the southern part of the State, nor is it so changeable, as we never have thaws, rain and mud in winter.

Third, crops that will grow on timbered land in the south part of the State, will grow here; it is admirably adapted to raising wheat and clover, in consequence of there being so much lime in the soil. A breeze almost every day will prevent wheat from rusting, and the snow will protect it from winter-killing. Corn does well with ordinary care. Oats grow so large they lodge. Potatoes are the best I ever saw. Being out where my friend J. S. Barker was digging his, I had the curiosity to count the number from one hill; the result was eighty-five good sized ones for table use, and numbers of small ones for the pigs.

Fourth, sleighing lasts from first of January to middle of March.

Fifth, frost generally comes from the middle of October to the first of November. Having a desire to see this country, I left Grand Rapids, Oct. 10th, 1854; we had our vines killed by frost there, two weeks before. When we reached Grand Traverse, the 18th, we found potato and tomato vines green as in summer.

Sixth, decidedly a good fruit country. Apple trees have not failed to bear a good crop for eight years, and peach trees have borne well for four years past on the Peninsula. The fruit trees appear to be rather weather-wise, and do not unfold their delicate blossoms until Jack Frost has taken his leave for the season. I am so fully persuaded it will be a good fruit country, that I shall add to my orchard 200 trees this spring, and for the information of those wishing to settle here, I would say I have a few thousand grafted trees, large enough to set in an orchard, and shall engraft 8 or 10,000 more this spring.

Seventh, all timbered land.

Eighth, there are no marshes or bayous, some cedar swamps, valuable for the timber, and when cleared, for meadows.

Ninth, timber is Beech, Maple, Basswood, Elm, White and Black Ash, Birch, Ironwood, Poplar, Hemlock, Pine, and Cedar.

Tenth, the Peninsula has been settled fourteen years; that is to say, some parts of it, but the inhabitants have not made improvements in building, clearing, and fencing that they would had they a good

title to their lands. Our place has been settled six years, but the main interest has been in the lumber trade; the farming interest is just beginning to be developed.

Eleventh, we should say come by land. First to Grand Rapids, thence north to Croton, Big Rapids, Cataract, to Hirsey Branch, eighty miles. Thus far there is a wagon road; thence north sixty miles to Grand Traverse on a trail. We have at present an exploring committee on duty, whose business it is to look out the best wagon route for a road from this place to Muskegon river, and we do not doubt but that with true Yankee enterprise it will be built this spring or summer. We even begin to have an inkling of a railroad. We see that the Grand Rapids and Indiana Company are making rapid strides towards the building of their Road; we think it is destined to pierce the forest of Northern Michigan, and we know that they are men of the right stamp to push it ahead. Who then will dare say we may not see the Iron Horse come rushing through our forest from the far-off Gulf of Mexico, within five years, and return laden with lumber, wood, flour, white fish and fresh trout that weigh from ten to forty pounds? Those who prefer the water can take passage to Mackinaw, and the Propeller Stockman will run from here to that place twice a week; or take the propeller Troy at Chicago, Grand Haven, or Detroit, and come to Northport, on the West Peninsula, and from there to any part of the Bay in small boats. Thus, Mr. Editor, if I have not answered all of Mr. Pennington's inquiries as fully as he could wish, I have at least written more than I intended to, when I commenced.

Respectfully yours, L. R. SMITH.

Elk Rapids, Mich., March 10th, 1856.

Varieties of Indian Corn.

As various as the soil and climate of our country, is the species of our native cereal *Zea mays*. From the Gulf of Mexico to the north western shores of Lake Superior, from the Atlantic coast to the shores of Oregon and California we see the gold and silver ears supported by their rich green foliage inviting both man and beast to "pluck and eat and be thankful."

No American farmer need think of succeeding in his profession if unable to raise this crop; not that he should raise every known variety of corn, for that would be almost impossible, but the particular variety that is adapted to his latitude or climate and soil. The northern farmer need not expect to succeed well with the large southern dent corn, of which there are several kinds, from the fact that these are the natural products of a southern latitude, a hot climate and a long growing season, but should be contented with those species that have grown and matured for a long time either in his own or a more northern latitude. It is a well authenticated fact that seeds of all kind brought from a hot climate to that of a colder one are

a long time in becoming acclimated, whilst those from a higher latitude seldom or never fail of producing an abundant crop unharmed by frost. This shows that we should always plant such varieties as are known to mature well in a shorter season than we commonly have.

There are a number of varieties of corn that succeed well in Michigan, and every farmer is partial to his own particular kind, either from fancy or because his ancestor and his neighbor always raise it. But this should not be the governing principle on which to choose the variety that we should raise, because the soil and situation of our farm are different from that of our neighbor. According to the experience of the writer a rich soil newish land and high manuring are essential to the growth and maturity of the dent species of northern corn in this latitude and even then we are very apt to see the tall majestic stalks cut down by the ruthless hand of old jack frost, and we obliged to make the best of half matured ears and worthless fodder. Let us be partial then to such varieties as can be depended on under all circumstances, as the "Eight rowed White Flint," "Yellow Flint," "Red Blaze," "King Philip," "Adams Early," and last but not least the pure white eight rowed "Flour corn." This last is the writers particular favorite, because it is flour in its substance and the only kind of corn that can compete favorably with wheat for bread, and in this particular it is acknowledged to be the *neplus ultra* of *Zea mays*. Every farmer should raise a few acres of it, and in order to keep it pure it should be planted on the west side of, or away from, other varieties. The two kinds of white and yellow above mentioned are two representatives of that very needful article—gold and silver, and a very essential means whereby to obtain the latter. The "Red Blaze" is a hardy prolific variety, very pretty to the eye and tempting to the ambition of both man and beast. The "King Philip or Brown Corn" is a very early kind, well adapted to late planting and short seasons, and is highly recommended of late through various reliable sources. "Adam's Early" seems to be the connecting link between the Dent and Flint species, but is quite early, thrifty grower, yields well and is excellent for boiling when green, as also is the "Flour Corn." There are many other varieties of corn that would be profitable to raise in Michigan, a description of which would be too lengthy for this article; suffice it to say that the "Wyandot prolific Corn" a variety resembling the Flour Corn, but dented and of south western origin, is said to be by far the most prolific of any variety of Indian corn ever yet discovered; but time will develop its superior qualities if it really has any, and the writer intends to give it a trial the coming season and will report the result through the *Farmer* for the benefit of its readers. Respectfully,

D. D. TOOKER.

Napoleon, April 14th, 1856.

Fat Oxen—Their Keeping.

EDITOR MICHIGAN FARMER:—I send you an account of a pair of fat oxen fed by me, and slaughtered at Dowagiac, as follows:—"Dick" was slaughtered February 20, 1856.

His live weight was 2296 pounds.
Weight of hide, 160 lbs., at five cents..... \$ 8 00
Weight of tried tallow, 212 lbs., at twelve and one-half cts. 26 50
Weight of dressed quarters, 1372 lbs., at an average of seven cts. 96 04

Total amount of sale..... \$130 54

"Line" was slaughtered March 20th.

His girth was eight feet eleven inches. Live weight, 2625 lbs.
Weight of hide, 160 lbs., at five cents..... \$ 8 00
Weight of tried tallow, 364 lbs., at twelve and one-half cts. 45 50
Weight of dressed quarters, 1894 lbs., at an average of six cts. 95 04

Amount of sales..... \$145 04

United live weight, 4921 pounds.

United amount of sales..... \$275 58

Live weight of oxen May 25th, 1855, when taken from the plow and turned to pasture, 4172 lbs., at three cts. \$125 16

Gain by feeding..... \$153 42

Cost of pasturing up to September 25th, four months at fifty cents per week..... \$ 8 50

Daily allowance of meal, six quarts per day, for same time, twenty-three and a half bushels at fifty cents..... 11 16

Estimated cost of fodder from September 25th, to December 25th, three months, at seventy-five cents per week..... 9 75

Daily allowance of meal same time, twelve quarts, thirty-three and three-fourths bus., at fifty cents..... 15 50

Estimated cost of hay to February 20th, eight weeks at one dollar per week..... 8 00

Daily allowance of meal, one bushel, at fifty cents, 28 00

Estimated cost of hay fed one ox to March 20th, four weeks, at fifty cents..... 2 00

Daily allowance of meal, sixteen quarts, at fifty cents, per bushel, same time..... 7 00

Butchering, cartage, commission on sales, &c.,..... 37 88 129 00

Leaving for my labor and risk..... \$24 33

Note.—Manure offset against interest on first cost.

JUSTUS GAGE.

Opinions of a Practical Farmer.

ROTATION—SEEDING DOWN—SORREL—PLASTER.

MR. EDITOR: I believe I have read in a very good old book, that man was placed here on earth to till the soil, not to rob it. I am glad that the columns of the *Farmer* are open to practical farmers. This is as it should be. I wish, therefore, to say a word through it to my brethren of the plow, on the rotation of crops, on killing sorrel, and other matters connected with tillage. The rotation I would recommend, and which I find profitable, is to take good wheat land, clear of all obstructions, say a field that has lain two or more years to clover either mown or pastured, sow early in the spring, half a bushel of Grand River plaster per acre on it, keep all stock off till middle of June;—then plow all under at least seven inches deep. Cultivate thoroughly before seeding in the fall. This I consider a much better chance for wheat than a summer fallow. I would then follow the wheat with a crop of corn, then oats and seed down. Let the field then lie in grass for two or three years and again plow up as above. With this sort of treatment land will improve for a century to come. This I call a proper rotation of crops.

Now in regard to seeding down land. Every practical farmer should raise his own seed. I would sow eight quarts of clover and four of clean timothy to every acre, sowing the clover one way and the timothy the other. In this way, the ground will all be seeded. Young clover should be plastered. When land is treated this way, the feed in the fall will pay for the extra seed and plaster. I believe that farmers in this State cling to the error of being altogether too sparing of seed, when putting down a field to grass.

I will now tell my brother farmers how to raise sorrel: summer fallow, plow late in June, after the sorrel is all ripe, four inches deep, plow all your land shallow. Sow no clover nor plaster, and you will have a good crop of sorrel. The way to kill out this weed, is to plow deep; seed heavy so that there are no vacant spots, top dress with plenty of plaster, you will have but little of the red sour stuff left in your field.

MR. EDITOR, I am opposed to the old way of summer fallowing. I consider clover well turned in a far better chance for wheat, than summer fallow. It looks to me contrary to nature to turn up our loose dry soil in the heat of summer to roast in the sun. Besides, we lose the use of the land for one year, which is, or ought to be, a great item with the farmer. Experience has taught me that the Grand River plaster is worth twice as much any other kind which we can get or that is offered for sale.

I consider that a good steell tooth cultivator will do twice the work of a drag. If any one doubts this let him try it.

"Why is our food so very sweet?

Because we earn before we eat.

Why are our wants so very few?

Because we nature's calls pursue.

Whence our complacency of mind?

Because we act our parts assigned.

Yours JAMES CLIZER.

Quincy, March, 18' 6.

What do you Live For?

Is it to amass wealth, that it may be said you are rich? Is it your object to build that house larger and nicer than your neighbor's, that you may exultingly boast over him? Does your wealth benefit any one but yourself? If not, then you are not enjoying what you might enjoy—you are not the happy farmer.

Mark the man who rises with the first song of the birds; his labor is pleasant through the day, and he enjoys the prosperity of those around him. His library is a collection of the choicest works, and among them you are sure to find the *Michigan Farmer*. His children are well educated—comfort and thrift surround him. It is his aim to make others happy while he lives, and when he is gone, he is thought of with pleasure, because he lived to do good.

Waterleil, Mich. 1856.

R.

Draining—Its Good Effects.

Mr. F. W. Fairman, of Canton, Wayne County, in a letter which we received some time ago, says:—I cannot refrain from expressing my conviction of the importance of draining the low unsightly swales that occur all through our timbered lands. We can scarcely find a twenty acre field without some wet spot to prevent straight uniform culture. With a little outlay in draining, we might cultivate the field throughout in a uniform manner, while it would be adding not only to the health of the country, but also to the value of the land. A year ago last spring, I selected a field with a run its entire length, which, unless there was a very dry time, prevented the flow from every run through it, and part of it, in fact, was a perfect mire hole. Through the swale I run a drain its whole length, and was thus enabled to plow and plant it to corn, which succeeded well. Last fall I harvested a good crop of wheat from the whole of it, and that which was on the low land was as good as on any part of the field. Last spring I laid 180 rods of drain in a five acre marsh, and was thus enabled to raise good corn. I use for these drains the sole tile manufactured at Northville. Some times they are laid on the bottom of the trench, where the earth is firm; but I prefer to lay down narrow strips of board and place the tile on them. This prevents the current of water from washing the earth away so that some of the tile will sink below the level of the others. This draining, it is true, costs something; but my opinion is, that I have realized twenty-five per cent. on what I have laid out for this purpose already.

Mr. Fairman also writes us that he has a dairy of fifty cows, from which he makes a large quantity of cheese each season, and that he will give the *Farmer* the benefit of his experience in this division of Agriculture at an early day. We hope he will. From the price which both cheese and butter is maintained at, and, also, from their small supply, the dairy is beginning to be an important interest, which is well worthy of the attention of farmers. The cost of the animals, their produce in milk, and the average of cheese and butter which each produces, the cost of feeding them, and the mode and cost of the manufacturing process, together with the amount received at the end of the year, are items of importance which will be eagerly read at any time.

TO MAKE WHITEWASH THAT WILL NOT RUB OFF.

—Mix up half a pail full of lime and water, ready to put on the wall; then take one gill of flour and mix it with the water; then pour on it boiling water sufficient to thicken it; pour it, while hot, into the whitewash; stir all well together and it is ready for use.—*Miss Hall's Book.*

Potato Raising.

MR. EDITOR:—I have been some time waiting an opportunity to give the readers of the *Farmer* my plan of raising potatoes; those who wish, can practice upon it.

The plan mainly consists in hoeing with the cultivator. For quite a number of years, my potatoes have been hoed in no other way, and the plan succeeds so well, that I shall continue it wherever the soil is sufficiently clear of stumps and stones to admit of the practice. The advantages claimed for this method are, first, it is much cheaper, besides a great labor-saving process. In the next place, it is far more advantageous to the crop, especially in a dry season.

In the old method of hoeing by hand, and *hilling up*, the growing tubers were deprived of needed moisture, for every one knows, who ever dug a hill of potatoes after a shower in a dry season, that it takes a vast amount of rain to wet an old fashioned hill. But an objector may say, "it needs a hill to contain the potatoes, or they will be crowded out of bed, and have no covering." Not so—the growing roots will accommodate themselves to circumstances; they never get much above the natural surface, unless the soil has been drawn over them, and they are thus compelled to climb in order to breathe—or in other words—to seek sun-light and air.

But another objector will exclaim, "That is a slovenly way of doing business, another newfangled notion; give me the good old method yet." Well, well, stranger, hold on, I am not writing this article for you. There are men of good sound common sense, and correct judgment, who do not follow in the footsteps of their fathers and grand fathers, when they find a more excellent way. I use less seed to the acre than most persons; individuals of my acquaintance, have planted as high as twenty, twenty-four, and even thirty bushels to the acre. From six to eight is sufficient for my purpose, cutting those half the size of a hen's egg, in two pieces, those somewhat larger into four, those still larger into eight, and put two of these in the hill, then cover to the depth of two inches. Deeper covering retards their growth, as they grow much more rapidly out of the ground, than in.

Last season my potato field comprised just an acre, so that I am enabled to give exact data, and make correct comparisons. The patch was planted in rows both ways, cultivated twice each way, passing wice in each row, and if the reader will not put me down as boasting, I will say a cleaner field of "praties" could not be found in these regions.

In the April number of the *Farmer*, Mr. Justus Gage gave a statement of his farm crops, with their cost per acre, per bushel, &c. His potatoes cost him twenty-three dollars per acre, and nineteen cents

per bushel. After reading that article, I figured on mine, and found they cost me twelve dollars per acre, and five cents per bushel.

Mr. Gage's net profit per acre was thirty-nine dollars; he sold for fifty cents per bushel; mine at that figure would be, net profit \$103.00.

R. RANDALL.

Clinton, April 12.

Stable Floors—Earthen Floors vs. Plank.

MR. EDITOR:—In looking over the pages of the *Farmer* for this month, I noticed an article written by George P. Sweet, about stables, in which he says that the plan of Mr. Cobb is all very good, except that part relating to the floor. He utterly repudiates the idea of a ground floor, and very assuredly asks why a good bed of straw upon the ground is better than a good plank floor. We think that if he would reflect for a moment upon the subject, his his own good common sense would answer the question. Nature designed that animals should stand upon the ground, and when man substitutes in its stead a floor of plank, he violates a law of nature, and the animal must pay the penalty. We will admit that it is not beneficial to the health of stock to stand in a damp place, but if our friend had ever seen a stable constructed upon the right plan, he would have known better than to say that a ground floor could not be otherwise than damp, except when frozen. It strikes us that he is writing upon a subject with which he is not as well informed as he might be, and if he will give us a call, we will show him a stable with a ground floor, which is neither damp nor frozen, but which is, on the other hand, much drier and cleaner than a plank floor ever can be.

The floor of which we speak is constructed with a trench behind the cattle to receive the droppings, and as regards the cleaning of the stable, one would suppose that it could not be much more labor to shovel the manure from this trench than it would be to gather it from a floor where it is strewed promiscuously about. Plank floors are always slippery, and cattle are very liable to fall and hurt themselves. One of our neighbors who has plank floors in his stables, said the other day, that he thought ground floors preferable on that account.

In short, we think that if any man will try both kinds for a short time, he cannot but come to the conclusion, that a "good bed of straw on the ground" is the best, notwithstanding the opinion of our friend that it is a slovenly and wasteful practice.

JOHN RICHARD.

Raisin, March 20, 1856.

TO INCREASE THE QUANTITY OF CREAM.—Have ready two pans in boiling water; and on the new milk coming to the dairy, take the hot pans out of the water, put the milk into one, and cover it with the other. This will occasion great increase of thickness and quality of the cream.—*Miss Hall's Book.*

Poland Oats.

EDITOR DEMOCRAT.—I notice that the article of Poland Oats is advertised for sale in this village. I understand the price is one dollar and fifty cents per bushel. I wish to say one word to farmers of this county concerning this article of seed. I raised last year from one-half bushel of seed sown upon about three-eighths of an acre 924 pounds of oats, equal to about twenty-nine bushels statute measure at the rate of seventy-seven bushels per acre. This crop was raised with but once plowing upon my poorest, hardest land, and I judge that one fourth of the heads were blasted or black, owing to the immense quantity of rain which fell when the oats were heading. Had it not been for this calamity, I am sure the crop would have yielded at the rate of over 100 bushels per acre. I should certainly advise those who can procure this seed, to do so, because I believe the extra price even at four dollars per bushel would more than be made up in the value of the first crop to feed out. Suppose the yield per acre measured in the half bushel is no greater, than it would be with the common oat, the difference in the weight upon forty bushels, an average crop for an acre, in favor of the Poland oat over the common variety, is 400 pounds, equal to twelve bushels and a quarter statute measure, worth four dollars at thirty-two cents per bushel, while it should be borne in mind that one bushel and a half of this kind of oats is sufficient to seed an acre, and that it takes from two and a half to three bushels of the common variety. It is furthermore claimed for this kind of oat, that it is remarkable for standing the drought—it roots so deep that the most severe dry weather has little or no effect upon it, except perhaps to make the crop of straw somewhat less, and I am sure from what I have learned of this variety both by observation and by reading, that upon almost any soil in any ordinary year, it will yield from one third to double what can be raised from any other variety in the country.

L. H. PARSONS.

—*Shiawassee Democrat.*

The Alleged Error in Premiums.

EDITOR OF THE MICHIGAN FARMER, SIR,—In the April number of the *Farmer*, page 183, I notice an article, charging the Executive Committee of the State Agricultural Society with altering the report of the viewing committee upon horses for all work. That article must have been written under a misapprehension of the facts of the case.

Had the writer examined the report as written by the viewing committee, and as it was read by myself on the Fair ground, I think he would not have written that communication. The books of the Society, including books of entry, reports of committees, &c., are always open for the inspection of any who wish to examine them, and I will at all times be pleased to assist in such examinations.

In order that there may be a full understanding of the matter complained of, I will here give the report of the Committee as it was read on the Fair ground:—

Report of the Committee of Class 14. Horses for all Work.

- No. 50, Smith & Crippen, Coldwater, Stallion, 5 years old, 1st premium, a silver medal and \$15.
 No. 155, A. L. Hayes, Marshall, Stallion, 6 years old, 3rd premium, \$10.
 No. 130, Edmund Bennett, Nankin, Stallion, 3 years old, 1st premium, Butter Knife and \$10.
 No. 81, Charles A. Jeffries, Dexter, 8 tallion, 3 years old, 2nd premium, \$10.
 No. 122, Abraham Fisher, Redford, Stallion, 3 years old, 3rd premium, \$8.
 No. 182, P. C. Lown, Constantine, Stallion, 2 years old, 1st premium, \$10.
 No. 173, Biram Miller, Rawsonville, Stallion, 2 years old, 2nd premium, \$8.
 No. 141, W. White, Birmingham, Stallion, 1 year old, 1st premium, \$5.
 No. 158, J. S. Tibbitts, Plymouth, Stallion, 1 year old, 2nd premium, \$6.
 No. 103, David J. Brown, Nankin, Colt, 4 months old, 1st premium, \$5.
 No. 41, F. W. Backus, Detroit, Colt, 3 months old, 2nd premium, \$4.
 No. 140, Conrad Walter, Rochester, Stallion, 8 years old, 3rd premium, \$8.
 No. 48, John McCrea, Coldwater, Mare 7 years old, with foal at foot, 1st premium, Silver Medal and \$12.
 No. 102, E. M. Crippen, Coldwater, Mare, 8 years old, with foal at foot, 1st premium, Silver Medal, and \$12.
 No. 190, Abram Fisher, Redford, Mare, 5 years old, with foal at foot, 2nd premium, \$12.
 No. 225, Ephraim Perkins, Birmingham, Mare, 12 years old, with foal at foot, 3rd premium, \$10.
 No. 503, Wm Burt, Mt. Vernon, Mare, 3 years old, 1st premium, \$10.
 No. 207, 'Gideon Bolio, Detroit, Mare, 3 years old, 2nd premium, \$8.
 No. 19, George Teagan, Redford, Mare, 2 years old, 1st premium, \$8.
 No. 208½, W. Burt, Mt. Vernon, Mare, 2 years old, 2nd premium, \$6.
 No. 118, H. A. Snyder, Greenfield, Mare, 1 year old, 1st premium, \$6.
 No. 109, Charles Field, Greenfield, Mare, 1 year old, 2nd premium, \$5.

Upon examining this report I observed that two first premiums had been awarded to mares four years old or over, viz: one to No. 48, owned by John McCrea, and on to No. 192, owned by E. M. Crippen. Of course neither of the premiums was paid, but the report was referred to the Executive Committee for their decision. The Executive Committee examined the matter carefully and found by reference to the memorandum of the viewing committee, and to the original entry that the mare and colt, belonging to Mr. McCrea, were entered under one number, viz: 48, and the viewing committee had entered the following words opposite the number in their committee book, to wit: "*First Premium to Colt.*" And against No. 192, the memorandum, "*first premium.*" The committee then decided that the first premium for mare belonged to Mr. Crippen, and a first premium for sucking mare colt, to Mr. McCrea.

By the above statement it will be seen that the Executive Committee did not change the premiums at all, but corrected an error that occurred in mak-

ing out the report, and left the report just as the viewing committee intended it should be.

Mr. Fisher has examined the books, and I think is satisfied that he was entitled to a second premium and not to a first.

J. C. HOLMES.

Secy. Mich. State Agt. Soc.

Report of the Committee on Essays.

To the executive committee of the Michigan State Agricultural Society.

The special committee on premium essays respectfully report that the essays presented for their consideration were six in number, and on the following subjects:

No. 1, On Thorough Drainage.

No. 2, On the Cultivation and Management of Wheat.

No. 3, On manures and their application.

No. 4, Fruit and Shade Trees.

No. 5, On the Potato.

No. 6, On the Cultivation of Wheat.

The committee, after much consideration, came to the conclusion to adopt as the rule of their action in reference to the essays, the following principles, which were in substance adopted by the committee on essays for the year 1853.

1st. To entitle an essay to a premium, it must not only be the best one offered upon any given subject, but it must also be of such merit in its subject matter and composition, as would fairly entitle it to a premium. It must, for this purpose, contain facts or establish a principle before unknown, or not generally known; or at least, if it establish no new principle, that it should give facts or experiments explaining or illustrating those already known, or tending to establish what was before doubtful.

2nd. Or if it professes to establish no new fact or principle, nor give any new illustration of what is already known, it should at least, embody and classify in an unusually clear, concise and authentic manner, whatever is known upon the subject of which it treats; it should avoid all *vague* and *uncertain* theories and conjectures, and be well sustained by established facts of general authority in the agricultural community.

Under these rules, which the committee regard as both safe and judicious, they have, after careful examination, agreed to recommend that premiums be awarded for the following essays:

To Edward Mason, of Detroit, for the essay on Thorough Drainage \$15.00.

To Edward Mason, of Detroit, for the essay on the Cultivation and Management of Wheat \$15.00.

To Edward Mason, of Detroit, for the essay on Manures and their application \$15.00.

JUSTUS GAGE.

A. Y. MOORE.

J. C. HOLMES.

Response to the Challenge.

EDITOR MICHIGAN FARMER.—In a previous communication we promised an article on "Morgans," which we intended to have prepared for the May number, but we notice you have several articles upon that subject yet unpublished, which may supercede the necessity of ours, and have concluded to wait till we see what they contain. On another subject, however, we are anxious to occupy a small space, much as we dislike to ask the publisher of a public journal to encumber its pages with what might be thought to relate more particularly to us or our animals, but justice to both at this time demands it; and as we propose to speak of the manner of testing breeding stallions that their merits may be known, it is a subject that will interest all horse breeders.

It is well known to all readers of the *Farmer* that the committee on horses of all work, at the last State Fair, awarded the first premium to the Morgan horse, Green Mountain Black Hawk. That Abdallah Chief was dissatisfied with the action of that committee, and made his complaint through the columns of the *Farmer*; in which he attacks the whole Morgan race in the following language: "It is undersized, seldom attaining more than good road speed, and has not the bottom, whatever its docility, of the Messenger breed. The chestnut which took the premium was one of the most beautiful specimens of his class we ever saw, but we doubt if he would suggest the idea of a progenitor of a race of large, powerful, swift, enduring horses, fit for all work." Again he says, "Abdallah was then ready, (at the State Fair,) is now ready, and will be ready at all times, until his spring season commences, to trot any horse of his class, owned in the State, over the Detroit Course." This we passed in silence, the proposition, although coming from Abdallah, required any horse accepting it to come to his door; although we felt that in justice to the committee whose judgment was assailed, we should subject our horse to actual tests so far as was reasonable, yet we did not feel under obligation to incur the expense or trouble of going to Detroit to substantiate the judgment of that committee, or satisfy Abdallah of his errors, leaving him to reap the full benefit of all he said against Morgans, and the full enjoyment if he found "a congenial pleasure in detracting his betters."

In the February number he presses it still further, and mentions Green Mountain Black Hawk, in particular, as a horse with whom he is anxious to make a trial of speed and bottom. Supposing of course Abdallah would be willing to go where the horse was with whom he requested the trial, we advised him immediately that he could have the opportunity to make the desired test. The March number,

(the first issue after the one containing his challenge,) in which our communication was published, also brought Abdallah's answer, "That his spring season had commenced, and no trial would be made this spring." There the matters rests, until we receive, enclosed in the April number of the *Farmer*, a fly leaf containing Mr. Parrish's "SETTLER." It reads as follows: "I propose to settle the controversy begun and carried on in the *Michigan Farmer* in reference to the speed and endurance of Abdallah Chief and Green Mountain Black Hawk, by trotting the three following races, (naming them,) for \$500 a side each race. To come off over the Detroit course, &c., &c." What has become of Abdallah's season that commenced the 1st of March?

This proposition reminds us of the cook, who for want of good eggs in an emergency tried rotten ones to settle his coffee, but to his surprise, instead of purifying the liquid, imparted to it a most unpleasant odor. Mr. Parrish can never settle this controversy, (if any exists) by throwing in a bad egg, it only makes his dish more rilly, and smells altogether too strong of horse racing. It must be decided between us, if at all, as horse breeders not as horse racers. If Abdallah is really anxious to make an exhibition of his speed in comparison with the successful horse at the Fair, why put a \$500 obstruction in the way. It strikes us this is a test of the wind, if not the bottom of the owners, instead of the horses. On that question we make no issue. In one of Abdallah's articles he says, "they purchased him not for racing but the improvement of stock." In addition we had been assured by the writers of the articles signed "Abdallah Chief," and one owner of Abdallah, that they desired to make a fair trial in honourable competition with stock horses, they wished it entirely free from betting or gambling, and as far removed as possible from the evils of horse racing. We in return advised them that we would have nothing to do with any other test, our only object in making a trial was to exhibit the speed and action of our horse as a stock horse, believing them to be essential qualifications to a first class stock getter; that we were anxious to show him to breeders not to sportsmen. Our views upon this subject remain unchanged, and when it becomes necessary for us to stake \$1,500 to get up or sustain a reputation for our horse, we will put him upon the auction block for sale to the highest bidder.

We are sorry to learn that the owners of Abdallah have changed their views upon this subject, but Mr. Parrish tells us the owners of Abdallah have agreed to invest the money and let him make the races. Abdallah in making this challenge furnishes very strong proof to sustain the charges of Mr. Fisk in the April number, that he designedly prevented a trial last fall, (which we had never supposed was

the case.) The conditions named are such as to leave no doubt that they are made on purpose to prevent a test. First, if any trial is made he requires us to make a bet of \$1500, this he knew we would not do. Second, we must go to Detroit to make the trial; this we had refused to do. Third, he proposed such tests in May, as he knew our horse would not be in condition to make, he being yet in the yard when the challenge was made, (seasons not commencing as early here as in Detroit, (1st March,) farmers in this climate have not been in the habit of having colts dropped in February.) Further, he knew our horse could not leave home in May without interfering with his spring season. Fourth, he proposes to go in September just before the State Fair, when a trial is to be made under the direction of the State Society, which we had advocated strongly before the examining committee at its last meeting. He knew very well we would do nothing that would detract from the interest of that occasion, when the class of men to whom we wish to exhibit our horse will be present to see and judge for themselves. If Mr. Parish's object was to make a proposition that would bring about a test, why advertise it in the Detroit dailies, in addition to the *Farmer*, that it might get a more extensive circulation. Was it not intended for an advertisement instead of accomplishing the object claimed?

"In conclusion, we wish it to be distinctly understood that we will have nothing to do with making any bets or races, but that Green Mountain Black Hawk will be ready at all times, in or out of his season, to exhibit his speed with Abdallah Chief, or any other breeding stallion, but will not leave home for that purpose until the next State Fair, when he will trot for a premium offered by the State Society.

F. V. SMITH.

J. B. CRIPPIN.

Pests of the Farm.

MR. EDITOR.—The time is at hand when it behooves the farmers of Michigan to put forth a vigorous effort to arrest the rapid spread of those foul weeds, which have almost ruined many farmers of some of the older states.

Already have the Canada thistle, the biennial May-weed, and Pigeon-weed, alias Red-root, found a lodgment in many farms in various sections of the State, threatening, unless a war of extermination is vigorously begun, soon to establish a fatal supremacy. He only who knows from sad experience, or careful observation, the almost hopeless contest the farmer is obliged to wage to effect their entire destruction, when they have taken possession of his domains, can at once appreciate the importance of sounding a timely note of warning. The Canada thistle, or in European nomenclature, "Cursed thistle" of which we design now more particularly to speak, is the acknowledged

generalissimo of this formidable army of vegetable pests; not perhaps because it is more detrimental to the growth of profitable crops, or ordinarily more difficult to eradicate; but from the insidious manner in which it obtains a foot-hold on our farms. The light downy plumes attached to the seeds, waft them in all directions with the wind, and thus oftentimes before the farmer is aware of the danger, small detachments from the enemy will take possession of various parts of his domains, prepared if unmolested, soon to offer a formidable resistance to his most vigorous attacks. Poor encouragement, we perceive, is afforded the careful and industrious farmer, to destroy the thistles on his own farm, if careless neighbors suffer them to flourish and ripen their seeds, to be wafted by every passing breeze to his own lands, or to places more remote. Hence the importance that every township, where the thistle has already made its appearance, should commence the work of its destruction, by making it imperative by law to employ suitable persons to cut them down before they ripen their seeds; both by the way-side, and in the fields, and at the expense of their negligent owners, who fail to do it themselves. It would be placing money in the pockets of those men, even could they be compelled to pay, as a penalty for their negligence, ten times the cost of the labor appropriated to this purpose. By circumscribing in this way, the limits of the thistle, and preventing their sending a single detachment from the place of their maturity, the first important step will have been taken towards their entire eradication. When young, the thistle is easily destroyed; having a simple tap root, it can be readily pulled up with the hand, or dug out with the hoe, if the soil be tenacious or compact; if not taken in time, a small patch of here and there a straggling plant, penetrating the sub-soil, and sending up stolons from its rapidly extending lateral roots, will soon form a large matted surface, proving to the unlucky farmer the truth of the homely old adage, "A stitch in time saves nine." The Canada thistle, is a perennial plant, its roots surviving from year to year. The most effectual methods employed for its destruction, are all founded on the well known fact in vegetable physiology, that the roots of no plant can long survive, if not suffered to send up shoots, to the light of the day.

The destruction of any plant is certain if we for a time effectually prevent the formation of leaves, or in other words, give them no chance to breathe. Leaves are the respiratory organs or lungs of plants, inhaling from the atmosphere no small portion of what constitutes their organic structure, and exhaling all useless matter. It is through the aid of the leaves, that the soluble matter, taken up by the roots of plants, is elaborated and prepared to enter into the composition of the plants themselves. Hence we perceive the more effectually we prevent the formation

of leaves, the sooner will the plant sicken and die. When the thistle is abundant as in many portions of Western New York, the ordinary methods of extirpation, are frequent and thorough plowings. Every obstruction to the plow should first be removed. In the early part of the season, it may be necessary, should the weather be favorable to vegetation, to repeat the plowings, *at least twice* a month. As the season advances and their growth is checked, the plowings need not be so frequent; the skillful farmer the moment they appear again, however, shutting them out from the light of day. In ordinary seasons the most inveterate patch of these interminable pests, may thus, if the work is thoroughly done, be almost, if not entirely destroyed, and the ground left in excellent condition for producing a fine crop of wheat. Where the soil is rich, deep and friable, and consequently permeable to air and moisture, the most thorough and repeated plowings frequently fail to accomplish wholly in one season the work of extirpation. When this is so, and the ground is sown to wheat, the patches should be closely watched during the whole of the subsequent season, and every scattering plant pulled or dug up as soon as discovered. These wretches on soil the most favorable to their growth, cannot long withstand unrelenting warfare. Other methods of their destruction have been successfully practiced by the writer, when the patches were small, as cutting them up with the hoe below the surface of the ground as often as they made their appearance; first cleaning the surface of all vegetation, so that not a plant should escape detection. We have thus endeavored, to direct the attention of the farmers of Michigan, to the existence of an evil, which threatens at no distant day, unless nipped in the bud, (as we now hope it may readily be,) most seriously, and alarmingly to affect the agricultural prosperity of the Peninsular State. W. R. S.

Marshall March, 1856.

Dwarf Standard Fruit Trees for Prairie Culture.

I noticed, in my travels through the west during the last autumn, that low headed trees were the most desired, and that such alone were appropriate to the prairie regions, where the winds sweep with great violence over the plain, uninterrupted in their course by those hills and forests which in other localities serve to break their force or divert their course.

I would therefore suggest that cherry-trees budded on the Mahaleb Stock, and apple-trees on the Doucain Stock, are precisely suited for the object desired. Both form low heads, such as are termed "Dwarf Standards," are neat and handsome, and produce fruit at an early stage, affording crops in less than half the time required for trees of the ordinary character.

Dwarf standard pears, ingrafted on the genuine Angers Quince, would combine the same results.

W. R. PRINCE. & Co.

Flushing, N. Y.

Stump Machinea.

MESSRS. EDITORS:—Having had some experience with stumps and stump machines, I proceed to answer the inquiries in the March number of the *Farmer*.

No person can reasonably expect a stump machine capable of extracting stumps, which would resist the power of two yoke of oxen, that could be handled as easily as your correspondent intimates. A machine that will lift twenty-five or thirty tons, must have considerable heft, to possess durability.

I have three machines on hand, two of which will raise twenty-five tons each, weigh 250 pounds, and are worth \$42; these are for light work, the other weighs about 350 pounds, is worth \$55, and will lift forty-five tons. The small machines require one yoke of cattle, or a span of horses and three men; the large one, four men to work them profitably. Usually we extract from fifty to eighty stumps in a day. Under very favorable circumstances 100 or more may be pulled in the same time.

There are several using them in this vicinity, who are satisfied with their efficacy, and speak well of them. Among the number are Mr. J. Cox, of Indian Fields; M. Willson and E. Nichols, of Kalamazoo; and Mr. Brigham, of Gun Plains, Allegan Co.

They can be carried on a common two-horse wagon or sleigh without the least difficulty, and occupy but little space in housing them when not in use. The screw machine is the most powerful, at the same time the slowest in its operation and more costly; and as no farmer should pull his stumps until the small fibers have decayed; they cannot come into general use. I have studied the wants of farmers in this particular, and have come to the conclusion that a stump machine must come within the reach of farmers as to price, do a reasonable amount of work in a given time, be durable and require but little space in housing, to meet with general favor. The above machines can be transported at trifling expense to any place on the Central Railroad. I contemplate manufacturing three different kinds of machines the following summer, which will meet the wants of all classes. Very respectfully, M. EVERETT.

Kalamazoo, March, 1856.

Query—Disease in Cattle.

MR. EDITOR:—Will you, or some of your correspondents, inform me through the medium of the *Farmer*, an efficient cure for a disease among cattle that has twice within the last year left me with an odd ox. Some of my neighbors call the difficulty Bloody Murrain. The sufferers with me, were taken very suddenly, and lived from three to five days; ears droop, water very bloody, apparent weakness about the loins, very little derangement otherwise, that I could discover. A name and a remedy for the above will be considered a great favor by the subscriber.

J. C. P.

The Messenger Stock.

EDITOR OF MICHIGAN FARMER—A considerable space is devoted, in the last number of the Farmer, to the praises of the Morgans, I have hastily collected a few facts in regard to the Messengers, confining myself to *performances*, and leaving the question of size where it has been long since settled, in favor of the latter.

Among the celebrated trotters of Messenger stock are the following, got by *Abdallah*, great-grand-son of imported *Messenger*, viz: *O'Blennis*, *Highland Maid*, *Hambletonian*, (Rysdick's), *Abd-el-Kader*, *Toby*, *Lady Blanche*, *Hector*, *Bill Poole*, *Frank Forrester*, *Paris*, *Jack Waters*, *Joe Husted*, *Ajax* and *Conqueror*.

Bill Poole trotted a heat over the Union Course, Long Island, in 2.30.

Joe Husted trotted mile heats, best 3 in 5, in harness, over the same course, beating *Fanny*, and *Reindeer*, 2.37, 2.39, 2.37½, 2.33. Again, over the same course, drawing 400 lbs., against *Tib Hinman*, in 2.40.

Highland Maid trotted over the Centreville course, L. I., mile heats, best 3 in 5, in harness, beating *Lady Vernon*, in 2.33, 2.36, 2.32½; and in her harness race with *Flora Temple*, in 2.32, 2.27. She drew a wagon in 2.28; being the fastest time on record, both to harness and wagon.

O'Blennis trotted mile heats, best 3 in 5, in harness, at New Orleans, beating *Lady Moscow*, and *Rhode Island*, in 2.36, 2.35½, 2.34, 2.33; and at Saratoga, mile heats, best 3 in 5, to harness, beating *Lady Jane*, and *Centreville*, in 2.35, 2.34½, 2.34½, 2.34, 2.33½, 2.36, 2.33; and over the last course, two mile heats, to harness, beating the same horses, in 5.15, 5.11; and again, at St. Louis, beating *Lady Suffolk* two heats, in a saddle race, in 2.30, 2.30; and again, on the same course, two mile heats, in harness, in 5.26, 5.20; and again, at Chicago, mile heats, best 3 in 5, in harness, beating *Chataque Chief*, and *Reindeer*, in 2.38, 2.35½, 2.37, 2.35; and, again, at Cambridge, three mile heats, in harness, beating *Kemble Jackson*, in 7.45, 7.43; performing the last mile in the second heat in 2.31.

Paris trotted over the Hunting Park course, two mile heats in harness, beating *Black Goliath* in 5.22 5.18.

Frank Forrester trotted two-mile heats, in harness over the Centreville course, L. I., beating *Lady Franklin*, in 5.16 5.18; and two-mile heats over the same, beating *Lady Franklin* and *Tacona*, in 5.13, 5.12½, 5.14.

Ajax trotted 100 miles inside of twelve hours—being the first horse that ever accomplished the feat.

Conqueror trotted 100 miles over the Union course, L. I., in the unprecedented time of 8 hours, 55 min., 53 sec.

The *Spirit of the Times*, of November 19, 1853, says of this last race:—

"This was one of the most extraordinary exhibitions of game and speed ever witnessed. Nearly a year since a private match against time was made, that no horse could be named at the post which could trot in harness 100 miles in nine consecutive hours, the match \$3000 to \$1000 on time—twelve months being allowed the parties taking the odds to select their horse. The animal made choice of was a large bay gelding, by many regarded as something of an 'old pelter,' and well known on the road here for a long time as a raw-boned 'hard-pulling devil,' (when excited) that could go the 'length of the road' and 'repeat' with 'any other man's horse.' He was bred in Orange county in this State, and had a good deal of blood; though not 'of age' exactly, he was 'no chicken.'

"No whip was used in the match, and the horse was stopped no less than thirteen times to have his mouth sponged, legs washed with spirits, etc.

"At the conclusion of this immense performance the horse did not seem unusually distressed."

Let the Morgan folks show a collection of performances by Morgan horses in public, beyond mile heats, that will compare with the foregoing.

To show further the estimation in which the *Abdallahs* are held by the highest authority, the reader is referred to "Youatt on the Horse." (Skinner's edition of 1854, page 52.) Among other things, he says: "The case of *Abdallah* and *Messenger* has been instanced to show that great trotters not thorough-bred, may and do beget trotters, and hence some would argue that a distinct race of horses may or does exist. But it is to be remembered that both *Abdallah* and *Messenger* are sons of *Mambrino*, son of old *Messenger*, and of *Messenger* mares, though not thorough-bred; and nothing is better known by all who have been in the habit of attending to these subjects, than that the *Messenger* family is distinguished for making first rate coach horses, quick in light harness and remarkable for endurance and long life. That *Abdallah* therefore is himself deep in the *Messenger* blood, should be himself a trotter and a getter of trotters, proves that like begets like, and that of a distinct breed, like the thorough-bred horse, characterized by the possession of general properties belonging only to and constituting that breed. There may be particular families distinguished for some peculiar qualities, not possessed in the same degree by other families of the same breed."

Abdallah Chief is a son of *Abdallah*, possessing in a remarkable degree, the qualities for which his sire and family are so famous, and I claim that he is as much superior for stock to any Morgan living, as a thorough-bred is superior to a French Pony.

J. PARRISH.

Hamtramck, April 21, 1856.

The New Vegetable.

We shall probably be able to get at the truth concerning the new tuber, which is to supply the place of the potato, by and by. Meanwhile as it is exciting a good deal of attention, and, as we have had had several inquiries relative to its merits and demerits as a fit plant to be used in this state, we take from two or three articles that have come under our notice such information as may be found of use to those who would make a trial of it. It may be well to premise that there are two extreme parties on this new plant, one of them denies every thing that is asserted concerning it, even that the root is known in China as an article of food except among that class of the population which makes puppies and rats a portion of their diet. The editor of the Connecticut *Homestead* after referring to the attempts to create a morus multicaulis or Rohan potato excitement for the *dioscorea*, states that he visited two of his neighbors "who have long been known as ship masters in the China trade. They did not recognize the drawing of the *Dioscorea Batatas* as an old acquaintance, and declared that they never saw such an article at any of the Chinese ports they had visited. They had works upon Chinese natural history, containing elegant illustrations of all the prominent flowers, birds, animals, and vegetable products of the Empire, but the potato was not among them. Ship masters having to look out for the support of their crews, as well as for their own, could not very well lie for weeks at a seaport, without knowing every prominent article of diet offered for sale in the market."

The same editor also applied to the proprietor of the Chinese Museum in New York, a gentleman who had spent a long time in China gathering his materials for the Museum; but he had never heard of it nor seen it during his residence there. He also cites Davis and Williams as authors and travelers who make no mention of it. In the *Country Gentleman* of Feb. 28th, the Rev. M. S. Culbertson, who resided for ten years in China, states that the *dioscorea* "is an inferior, unpalatable article which is never eaten except by the very poorest classes." It must be remembered however that this is all written by one who has evidently as yet had no personal experience with the plant, in any way, and that his authorities, though acquainted with China, are equally as little informed as himself as to the merits of the plant. It must, however, be admitted, that when Mr. Prince published in his pamphlet such a sweeping paragraph as the following; he deserved some such criticism, for we cannot learn that he had any basis on which to make so broad an assertion, and if he has or had, he ought to give the authorities. No one man's word is reliable on so important a matter. Mr. Prince, after reciting a glowing description of the tuber thus:

"Root fifteen to twenty five inches long, and two inches in diameter, tapering from the head, the outward appearance similar to the white variety of the sweet potato; skin thin readily peeling off when cooked; flesh snow white, delicately farinaceous, with a slight almond flavor, exceedingly grateful when used in the same manner as the ordinary potato and deemed richer in nutrition and superior in quality. It can be cooked by water or steam, or roasted, and in appearance and taste is like the finest mealy varieties of the common potato. It requires but ten minutes boiling, whereas the common potato requires twenty minutes. This root possesses another advantage, it produces a fine pure white flour, which will compare advantageously with the wheat flour of any country, and is equal, if not superior nutriment."

To this the author of the pamphlet adds. "It may, be fairly assured that a *vegetable which has for centuries formed the common food of the immense population of China and Japan*—adopted as such by nations so regardful of domestic economy, and so careful and economical in their appropriations of the soil must be possessed of no ordinary merits." Well so we should think, if the assumption were correct, and there were any authorities to show that it approximated to the truth, unfortunately for the enthusiastic nursery man who has the tuber for sale, he does not cite any one except the reports of parties, who have had little more actual experience than himself. In fact all the knowledge we have of the plant is gathered from foreign sources, and those almost altogether French. In England it has as yet, gained no footing beyond the precincts of experimental gardens, and in this country we have not yet had even that on any scale larger than a green house pot or longer than a single season.

The following account of this plant is taken from the last published number of Hovey's Magazine and contains in short space all that is known about it up to the present time.

The French, succeeded in introducing one of these yams five years ago. It was sent by M. de Montigny, consul at Shanghai, to the Museum of Natural History of Paris, with a statement that it was consumed as largely as the potato in Europe. The Museum distributed the roots among several cultivators, and it was soon disseminated in various parts of France, and attracted the attention of scientific men. In 1854 it was first introduced into England by Mr. J. Henderson, of London, who cultivated it successfully and first offered the roots for sale. His account of it is highly favorable. "Boiled like a potato it proved extremely good with a rather nutty taste."

An analysis of its nutritive properties, made in France by order of M. Pepin, gives the following results, in 100 parts:

Water,.....	70,40
Starch,.....	18,30
Alkaline phosphates, (ashes,).....	0,78
Albuminous matter (a large quantity, saccharine matter, (trace,) cellulose mineral substances, &c.	10,52
	<hr/> 100,00

M. Decaisne regards this yam as superior in quality to the potato, and richer in nutritive principles. Its roots are as white as snow in the interior; they neither contain visible fibres nor tough woody matter and when boiled they become so soft that a slight pressure converts them into paste, which he can only compare to that of the finest wheaten flour. Cooked by steam or roasted they look and taste like the best potatoes.

Of its hardiness and keeping properties it is stated by M. Naudin that the roots lived out in the open ground in the winter of 1854-55 unharmed, with the thermometer at 10°, they commenced growing the 10th to 20th of April, and that roots preserved in a cellar kept perfectly sound from October to May, without any sprouting, as is usual with the potato. It does not appear to be affected by heat or cold.

The roots of the yam, when grown to full size, are from twelve to nineteen inches long, from two to three inches broad, and weigh from two to four lbs. each. They are large at the bottom end, tapering gradually to the top, which is not much thicker than the finger. Six roots taken up on the 2d November, 1855, weighed thirteen and three-fourth pounds, or two pound and four ounces, each.

From all that has been written upon its cultivation both in France and England, but more particularly in France, we gather the following hints in regard to its treatment:—

It appears to succeed best in a light, loamy or sandy soil, very deep, that the roots may penetrate it without any obstruction. It does not appear to be necessary that the earth should be very rich, though no doubt it should be in good condition. For field cultivation it should be ploughed deep, and then laid up into ridges eight or ten inches high, and about eighteen inches apart; but the roots should only be put in the rows, six or seven inches apart, experience having proved that they may be safely and economically grown so close, as they are so long, and have so few side roots, that it is more important to get as many of them as possible than to grow them to a great size. The most profitable are those about the size of carrots; but it is all important that the ridges should be high, in order to facilitate the digging. The tops may be allowed to run over the ground, as is common in cultivating the sweet potato, or they may be staked up. From experiments made in France by M. Decaisne, both ways, it appears there is but little difference in the crop. The roots may be

cut into sets an inch or two long, and planted on the tops of the ridges and covered an inch or more deep. Their growth is not facilitated by starting them in heat but rather retarded, and the best results have been attained by planting them directly into the ridges. They should be allowed to grow till late in autumn, and then dug and stored like potatoes. From calculations made by M. Decaisne from the product of a small piece of ground, he believes the crop will be much larger than that of the potato, perhaps double, though on this point he does not venture to state with certainty from his limited experiments. It is his opinion that only the upper half of the root should be used for planting, and the bottom or thicker part retained for food.

Mr. Henderson describes the Chinese mode of growing the Dioscorea, and also his own way of cultivating it as follows:

The manner in which the Chinese cultivate it is extremely simple. The earth is first formed into ridges, when small tubers, or portions of large ones, are planted on the top, at about three feet apart; after the plants have attained a little strength, the shoots are spread over the sides of the ridges and pegged down at the leaf end, six or eight inches from each other, (care being taken to cover the joints or parts pegged down with a portion of earth,) when they soon strike root and throw out tubers; by this means, immense quantities of roots, of the size of early-framed kidney potatoes, are raised on comparatively small pieces of ground.

The above is the ordinary Chinese mode of culture, but to obtain them of a large size, small tubers, or portions, are planted on ridges, at ten inches to one foot apart, and the plants are allowed to grow freely till late in the autumn, when the foliage is cut away and dried, or partially dried, and given to cattle; the tubers by this means attain on an average of one pound and upwards in weight. The produce, when the ground is required for other purposes, is taken up and stored away for winter and spring; and it seems a peculiarity in this root, if exposed to the frost, it is not injured by it, nor does it have any inclination for sprouting till the natural season for planting.

Naturally, the propagation of the Dioscorea is similar to that of the potato; that is, planting out the small tubers where they are to grow; but now, when it is desirable to rapidly increase it, the roots may be cut into small pieces, potted, and placed in an exhausted hotbed, where they will soon throw up shoots; these may be taken off with a single leaf and inserted in small pots under a hand glass, where they will speedily root and form small tubers, which may be turned out into properly prepared ground in May. The pieces of roots from which the cuttings were taken, will also form small tubers, and may have the same treatment as the large roots; in this way a good stock may soon be produced.

Horticultural Department.

S. B. NOBLE, EDITOR.

Winter Apples.

CHAPTER I.

As the surplus fruits of this region are mostly raised by farmers, who have but little spare time in the season of the earlier varieties, they have planted very largely of long-keeping sorts; and we have, in consequence, a somewhat extended list of winter fruits in cultivation. Among the early winter fruits are the following:—

Black Gilliflower is considerably cultivated. It is of fine, even size, a good bearer, and occasionally a person is found who admires its flavor, but without doubt, nine-tenths of the lovers of fruit will agree with Mr. Elliot, that it is unworthy of cultivation; as it is dry, mealy and poor in flavor almost as soon as mature. Season, December to January.

Fameuse, or Snow Apple, is considerably grown, and generally admired as a late fall and early winter fruit. Its bright red cheek, with its pure white and exceedingly tender flesh, (to which it owes its name,) and its very juicy and spicy, though not rich flavor, must always render it popular: added to which it is a good grower and bearer. Season, November to January.

Detroit, or Black Detroit, is new hereabouts; has borne a full crop the past season. Tree a good grower. Fruit large, showy and fine, but quite liable so far, to be affected with black scabs or spots. Texture very compact. Fine grained, crisp, juicy, with a mild, rather rich, but peculiar flavor. October to February.

Wine, is a name applied to an apple much grown here, and highly esteemed for cooking; but its correctness to name, is to my mind, more than doubtful. Tree a strong grower, with a round, open, well formed head, and very large leaves; a great bearer. Fruit roundish, slightly conical, very large and showy; mostly covered with broken stripes of pale and bright red on a greenish yellow ground. Texture coarse, crisp, tender; flavor rather acid. On account of its large size it is apt to be blown down prematurely. It is an excellent cooking apple from the last of September to January.

Minister has now borne. It is a rather large, somewhat conical fruit—greenish yellow, striped with red. Rather tart to suit the majority of tastes. Have not yet tested its keeping qualities. Season, according to Elliot, October to December.

Twenty Ounce Apple, is perhaps too extensively cultivated here. Its very large size, and high color, have doubtless contributed to its popularity, and its qualities for cooking and drying will always render it desirable. Like "Wine," its great size, and weight,

render it very liable to be prematurely blown down. Tree a strong, rather straggling grower, and a good bearer. Lasts till January. Usually known here as "*Twenty Ounce Pippin*."

Herefordshire Pearmain is considerably cultivated, and during its season is one of our most desirable dessert fruits. It is of medium size, and of very mild but rich flavor. Without good culture, and suitable pruning, the fruit is apt to be small and scabby. Tree sometimes overbears. Season, October to February.

Red Gilliflower, (of Thomas) *Scolloped Gilliflower* (of Elliot,) is somewhat cultivated. It is liable to the same objection here, that is made against it by Thomas in Western New York, viz: thin bearing, and imperfect fruit. But growers will cultivate it on account of its flavor, in sufficient quantities for their own use. Season, November to February.

Peck's Pleasant is new here. It has produced a few splendid specimens, in appearance and color somewhat like a large Rhode Island Greening, except that it is somewhat obtusely conical and flattened, with calyx large and open, and a blush on the exposed side. Said to keep till February, and sometimes till April.

Westfield Secknofer is successful here as elsewhere. It is deservedly popular, especially with those who prefer a mild flavor. It is esteemed one of our most valuable and profitable early winter fruits. Season, October to February.

Bailey Sweet has borne a few specimens. It gives promise of good qualities as an early winter fruit, but it is yet too soon to speak confidently of its merits. Mr. Barry placed it among the best sweet apples from October to January.

Belmont has born one very heavy crop. Fruit very large, showy, and of high sprightly flavor, coarse in texture; very tender. Tree a fine grower, and promises to be a good bearer. Keeps till February.

T. T. LYON.

Plymouth, 1865.

Dahlia.

The Dahlia is a perennial tuberous rooted plant, a native of Mexico; new varieties are raised from seed, and now number several hundreds, some of which are splendid flowers. They will decorate the garden from the first of July until the fall frosts with a profusion of flowers, from ten to fifty on a single plant. They are of easy cultivation, and every flower garden should have some. Those who have kept the tubers through the winter, safe from frost may consider themselves fortunate, and during this month, should set out the bulbs into the garden, where the earth is moderately rich; as they grow, tie the branches to neat rods, keep the weeds down, and water, if very dry, with luke warm water.

Grafting and Budding.

It has been impossible to procure scions of pears and plums that have been uninjured by the cold of the past winter, that will be safe to depend upon for grafting, therefore it will be advisable for those who wish to improve their fruit, to prune off some portion of the top to promote a new growth of wood, into which may be put buds sufficient to form an entire new top the first year's growth. Budding may be done on the Pear and Apple in June and July, and on the Peach till the middle of September. We prefer budding to grafting any tree that is of sufficient size to transplant.

Fruit Prospects.

A very protracted and severe winter has passed; its intense severity has not only destroyed the peach buds, but thousands of flourishing trees have been entirely destroyed, to an extent never before known in Michigan. Plum trees have shared a similar fate but not quite to so great an extent. Pear trees have suffered severely, a portion of which are dead; cherries have suffered some; quinces are much injured. Nearly all the grapes that were left unprotected and above the snow are dead. Apple trees do not appear to be much injured, we have noticed that a portion of the fruit buds are destroyed, but what portion cannot now be known. That fruit trees and fruit buds are so much injured through the entire State, we do not know, but we have seen them in several counties and have similar reports from others. The general impression prevails that the fruit in the entire State, except apples, will be nearly a total failure. Even if it is as bad as the present prospects warrant us in believing, it should not discourage us from trying to make the best of it we can. By a judicious pruning many valuable trees may be saved, and in a few years recover from the shock. We advise those whose trees have been injured, not to be hasty to prune or cut down the trees, but wait patiently for all the buds to grow that will, for every leaf is important to help support the tree. After the leaves are expanded, a judicious pruning by shortening in the branches, may be useful, and in two or three years the trees may again be brought to a desired shape.

Shrubbery and Flowers.

The unusual severity of the past winter has destroyed much valuable shrubbery that has been nourished and trained by some fair one, fondly anticipating a profusion of flowers, but disappointment is the portion of all; by it we are admonished that a large part of our happiness is in anticipation only.

We sympathise with those who have been for years caring for some favorite plant to bud and

bloom, who have now their hopes all blasted. We have noticed many valuable roses that have received the care and attention necessary to produce a luxuriant growth, and tastefully trained to a trellis, that have been killed to the ground, or their beauty defaced, and several years of care will be required to grow and train them as before. Among all of Flora's productions, nothing excels the rose, but we think too much care has been bestowed upon it to the exclusion of very desirable plants. Amongst the perennial flowering plants, may be found many superb flowers. Among the Phloxes alone, may be selected some twenty varieties, producing all colors and shades, flowering from early in the spring to late autumn in a constant succession. The annuals also can furnish some fine specimens, and among the superb bulbous-rooted flowers, may be found, many scarcely inferior to the rose, in profusion of bloom, and delicate tints.

Shrubs and roses that have been injured should be carefully trimmed after they begin their growth, and in a year or two, may be brought to their desired shape. They should not be forced into a too rapid growth.

To Prevent Apples from being Wormy.

The Apple Worm, which is so prevalent in this part of the country, without doubt is produced by a moth, or miller, which deposits its eggs in the calyx of the apple when it is very small. (When I speak of apple worms, I do not mean those caterpillars which infest our apple trees almost every spring, devouring the leaves and almost destroying the trees.) These eggs soon become worms, and gnaw holes into the apples, where they feast themselves all summer, and sometimes nearly all winter. I need not spend time to describe these worms, for every man who has eaten wormy apples knows very well what they are. I suppose these worms turn to millers in the spring or forepart of summer, and deposit their eggs on the young apples the same as the previous year. The damage done to apples every year, amounts to a great sum. Many of the apples after they are punctured, fall from the trees before they are half grown. Many that remain on the trees till fall, will not keep more than three weeks after being picked. Every fruit culturist knows that apples will keep but a short time after the skin is broken so as to let in the air.

Having been troubled with wormy apples for the last fifteen years, I thought I would try an experiment on one tree this season, to see if I could not stop these marauders in their wild career. I took half a dozen quart beer bottles, and filled each half full of sweetened water; I then suspended them from the branches of the tree in the following manner: I tied leather straps three-fourths of an inch wide around the branches to prevent them from being girdled; to these leather straps I tied hemp strings, to which I attached the bottles, leaving them open to allow the millers to enter.

I let the bottles remain in this situation five or six weeks, and on taking them down and emptying them, I found the millers had entered in great numbers, and were drowned in the liquid. In one bottle I counted

fifteen, in another forty, and so on. The tree thus treated produced fourteen bushels of large fair apples while the fruit on the trees not experimented upon was wormy. Whether the remedy produced all the difference or not, I will not pretend to say, but I hope some fruit culturist will be enterprising enough to try the experiment next summer, and report their success to the editor of this or some other paper.

Another method that I would recommend for destroying these millers that produce the apple worms, is to take shavings or straw, and light fires in the orchard in the evening, in the month of June. As soon as the millers see the light they will fly towards it and be consumed in the flames. Millions may be destroyed every season in this way.

ELIHU CROSS.

—Country Gentleman.

A Few Facts for Consideration from Various Sources.

Albert Montague, of Hampshire county, Mass., has tried several experiments with the subsoil plow. A piece of land subsoiled three years before, was just planted to corn, but no difference was perceived the first season. Since it has been in grass, however, he is of opinion that the subsoiled part of the field produces at least a ton more hay to the acre. Another lot tried with broom corn, was found to yield from 150 to 200 pounds more brush to the acre. This would certainly pay for the labor and expense of such work.

Green Corn Fodder.—A buyer of butter and cheese for the Boston market, has remarked that the best butter and the best cheese is produced on farms where green corn fodder is most used. That is, where corn is sowed broad cast, or in drills, and cut green. The cattle, where fed on this article, also had a better and sleeker appearance.

The New Chinese Plant.—Mr. Prince, of Long Island, presented some fine specimens of the new Chinese tuber at a late meeting of the New York Farmer's Club, which had been grown by himself from sets imported from France. If there is no deception practiced, and the sets of the true variety can be obtained, it seems to be worthy of a trial at least.

Wool and Sheep.—P. A. Browne, of Philadelphia, has written a letter to the Wool Grower Association of New York, in which he insists, that to improve the fleece, or to be successful in breeding, it is indispensable that the breeder should first commence with a pure breed, and then scrupulously avoid all crossing of two species. He condemns the action of the association, because in its programme no allusion is made to purity of breed, but on the contrary premiums are actually offered for hybrids, from which he asserts no improvement of breed can ever be made. He condemns French Merinos as hybrids, but endorses the purity of the Spanish, the Saxon and the Silesian breed, saying that in Germany, Saxony and Prussia, the Spanish Merino were carefully kept separate from intermingling with the common native sheep of those countries, but that in France the Merinos had been mixed, and hence the name of *French Merinos*. Mr. Browne is quite an investigator, and his researches into the properties and nature of wool and hair, and the qualities of the animals that produce them are of the highest importance. His work on the subject is attracting much attention in Europe.

The Household.

"She looketh well to the ways of her household, and eateth not the bread of idleness."—Proverbs.

EDITED BY MRS. L. B. ADAMS.

Dick Sherwood vs. Woman.

It will be seen that our new correspondent, Dick Sherwood, is quite dissatisfied with the manners and practices of mothers and daughters in neighborhoods where it has been his misfortune to travel; and if all his experience in life has been confined to the class he speaks of, he is, indeed, to be pitied. But if his mother was an estimable woman, he is doing her memory little honor by looking for her like among the idle gossips, and silly genteel young ladies who think it vulgar to know how to make their own dresses. Let him go out among the thriving farmers and the flourishing new villages where our traveling agent has been, and, if the reports we receive are correct, he will there find women worth having. They not only subscribe for the Farmer, and read it, but in many instances they act as local agents, besides fulfilling the duties of postmaster, in their respective towns. We could tell him of hundreds of young ladies of the present day, who are quite as intelligent and industrious as their grandmothers were, and who would be just as willing to spin and weave and make up home-made clothing as their fathers and brothers would be to wear it. But it is not necessary nor economical to do such work by hand now, as our friend very well knows, and he ought to have the magnanimity to rejoice that it is not, and to congratulate women on the changes which have taken from their hands so much of the mechanical drudgery of life, and given in their place more and less laborious occupations, and better opportunities for education and intellectual development. It is true all do not improve or take advantage of such opportunities as they might; neither, we believe, did all our grandmothers and great aunts spin and weave and sew to the full extent of their ability, refraining from tea-party sociabilities, and confining their ideas of life and its enjoyments to the loom, the cow-yard and the kitchen. Little girls played with rag dolls fifty years ago as heartily as they do now with kid and waxen ones; and young misses in their teens had the same pride and love of show as now, though perhaps displayed in a different manner.

But let our friend look at his own sex. Have they not changed too? And have all become better by the change? Who among them would be willing and content to live and dress and do and think as their grandfathers did? The world is changed, and ever changing in its manners, its habits of thought, action and expression; and woman would exhibit a very contemptible degree of stupidity if she alone

remained stationary. We do not blame our correspondent for wishing that social virtues and home industry might be perpetuated, and that mothers would teach their daughters that through these lies the surest path to domestic happiness and prosperity; but he should not denounce the whole sex and generation for the faults of the few, through whose misbehavior he has been made uncomfortable! Besides, are not these very mothers of whom he complains, the daughters and grand daughters of mothers who lived fifty years ago? And what has become of all the good lessons they learned in girlhood? and where is the lasting effect of all the wholesome examples? for, if we are to believe Mr. Sherwood, all mothers at that day were pattern house-keepers, and trained their daughters in the same good way. Alas, we fear that if the whole matter were closely scanned, it would be found that the world was no nearer perfection than at now. All the faults and follies of our race were not born with the present passing generation, neither were all the virtues of the past buried in the graves of our ancestors.

If our friend has had the misfortune to find more weeds and thistles than fruit and blossoms in his path, we pity him, and assure him that there are yet in the world, blossoms as bright and fruits as precious as any that bloomed and ripened on the household trees of fifty years ago. Change your course, friend Sherwood; quarreling with a weed because it is not a garden flower, will never make it any better, neither can you make people who have their senses believe that all our sweet household blossoms are nettles in disguise. If you cannot cultivate, improve and make lovable those among whom your lot seems cast, then leave them to more patient and hopeful missionaries than yourself; go among those who have inherited the virtues of the ancestors you honor, and, if you are deserving, you may yet find one worthy of the name your mother bore. It is not to be denied that there is some cause for the complaints you make, but a querulous, fault-finding spirit works no reforms, and such wholesale accusations fail of effect from their very injustice.

We refer with pride to the Normal school at Ypsilanti, for a refutation of the insinuated charges of ignorance more than once preferred against farmer's daughters as a class. Let any one visit that Institution, and inquire into the history of the female students, and they will soon ascertain that a large proportion are the daughters of farmers, and that they are generally as well versed in the knowledge of domestic duties, as their school-room recitations prove them to be in the arts and sciences so ably taught there.

We cannot say more now, but subjoin the following letter, just received, and simply ask our friend if Susan is not an exception to the class he describes. He has only to open his eyes to see hundreds of Susans in this western country.

A Home in the West.

The Farmer has long been a welcome visitor at my father's house. I have read it with interest several years; but never have I taken so deep an interest as since the "Household" was introduced with its worthy mistress at its head. I now feel confidence to speak to my "sisters" through the medium of the Farmer.

SISTERS:—I live in the wild woods. I left the home of my childhood, a year since, and came here with my husband and little daughter. At that time I had one neighbor only, within eight miles; and that one lived more than a mile from us. Do you ask if I was homesick, lonely, or discontented? I sometimes thought of my friends, far, far away, of my old happy home, my parents, and little brothers; the many comforts and conveniences which I once enjoyed, and, of which I was now deprived, but I was not unhappy. I could see in the future a pleasant home, and many fair prospects, which I have already realized. The trees are fast falling around our comfortable, well furnished log house. I have good neighbors, not such as are commonly called "backwoodsmen," for they all came from some place not long since. While I now sit writing, I can see the smoke rise from my brother's chimney, and hear his wife call him to supper. I can put on my bonnet and walk to my father's in ten minutes, (just at this time, however, it might take fifteen, as the mud is unmercifully deep.) A saw mill has been built within a mile and half of us. A town has become organized, and officers elected. Roads are being laid out, and also school districts, and measures are being taken for building a school house in our neighborhood. I have many things to make me pleased with my new home. And I cannot help feeling a little selfish pride when my husband tells me how bravely I led the way into the wild woods, which had only been inhabited by the wilder Indians.

SUSAN.

Newaygo Co., April, 1860.

Where should Wives and Mothers seek Happiness?

I commence by asking the question, and I expect an answer. Who of us cannot see the contrast between the present and half a century ago? Then mothers presided over their own households, and instructed their children to be useful and industrious. They taught their daughters to seek happiness at home; taught them that their sphere was in the bosom of their families; taught them to revere their parents and respect their brothers, and that their happiness should consist in making home cheerful and pleasant to father and brothers when they returned from their weary toils in the field. It was made a part of their pleasure to have ready a warm and palatable meal; they could aid in milking the

cows; they could ply the needle, so that a seamstress would not have to be hired to do every little stitch of sewing, and they could spin and weave, so that fathers and brothers instead of having to buy the counterfeit stuff they do at present, were proud to wear the garments their mothers and sisters manufactured.

You may ask what the daughters do now. If you had seen so much of domestic discord as a traveling agent sometimes does, you would not need to ask. Why, they go visiting six days out of seven, and then are troubled to find days enough to go! I guess some go on the seventh. If you wish to find a woman at home, you must go early in the morning, or after it is time to retire. And the daughters go too, as soon as they are old enough to gossip, which is as soon as they are out of their teens. Before that, they are left at home to rummage the house, and every chest and drawer must have a going over, and instead of doing anything useful, they make up dolls and carry them about in their arms. Is not that a fitting employment for young ladies? Mothers, what an account you will have to render for the pruning or not pruning of the tender plants given you to rear! Instead of instructing them to make their own apparel, a seamstress must be sent for if any repairs are wanting in the wardrobe, because it is unpopular for young ladies to make their own dresses.

"O, ma!" exclaims a young lady, "how vulgar you are getting, to want me to make my own dresses!"

"Ah," says one, "he is not a woman's rights man!"

But I answer that I am, though not in favor of women's using men's rights. Their rights are not to aspire to the presidency, nor to any other State office; they are to preside over their own households, and make them cheerful and pleasant; they should keep their own house and not their neighbor's house keep them, till the husband comes from his toil, weary, and finds a cold, cheerless home, no one to meet him with a welcome smile, no warm supper to refresh him, but a cold lunch which he must take up with for that night, and the next the same. Wife and children are gone—he must do the best he can.

It is a maxim that the seeds of industry are perennial; so are the seeds of indolence. I ask, why is it that we find so many desolate homes, so many ruined families? Is it not because the husband cannot find happiness where he should, and so seeks it elsewhere? Perhaps he resorts to the wine cup, wasting that deathless mind in carousing with any reckless associates he can find. Such is the fate of many.

Mothers, assert your rights; preside over your own households, and you will have less reason to complain.

I have contented myself with single blessedness because I have not yet found such a woman as my mother was.

DICK SHERWOOD.

Economy in House-Keeping.

Cucumbers for pickling should be carefully cut from the vines, rinsed in cold water, (not washed,) and after draining, place them in a tub or firkin, the bottom of which should be previously sprinkled with pure salt; put a layer of cucumbers, sprinkle quite white with salt, and thus alternately till your tub is full. Cover them carefully with a cloth, and have a wooden cover or follower to put on after the cloth, on which place a weight sufficient to keep your pickles under the brine which will accumulate as you fill up. Whenever the cloth, is removed to add fresh cucumbers, be careful to keep the scum that rises, on the top of the cloth, and rinse it off in water, as it will have a tendency to soften the pickles if it should become mixed with the brine. When the cloth is replaced, tuck it down carefully around the edges, that no flies may get in. When wanted for use, soak your pickles in a tin or wooden vessel, in warm water till fresh enough, then scald in vinegar, and season with spices as you like.

Those who are fond of tomatoes can make an excellent pickle by slicing them when green, put in a vessel (stone is the best) scald in weak salt water three mornings in succession, using new water each time; then take vinegar sufficient to cover them, add cloves, cinnamon, mustard, &c., scald the vinegar with the spices, pour it over the tomatoes and cover close for use. Add onions with the vinegar if you like.

Another good pickle is made by chopping onions and tomatoes with green peppers enough to season, put in a stone vessel, and pickle as above.

Cheap pepper sauce, and of a superior quality may be made by putting green peppers into a bottle and fill up with good cider vinegar.

Sweet corn, well dried and put where it will keep dry, makes an excellent dish for winter use. It is easily prepared. Cut it from the cob when it is just ready to boil, put it on plates, or pieces of boards that have been planed, set it in a moderately warm stove or oven, and it will dry in a few hours. Care should be taken that it does not scorch.

Tomatoes can be dried in the same way. Peel, slice, and place them singly on plates, turning them when they become dry on the upper side. When thoroughly dry, be sure you keep them so until wanted for use; then soak them in warm water a short time, season, and stew as before drying.

Fruit of any kind should never be dried in the sun, but if from necessity it is, it should be thoroughly heated in a brick oven or a stove, before putting away, as in the time of fruit drying, it is impossible to keep it from the flies, unless it be closely covered in a drying house.

It is always well for a family to keep some simple medicines on hand, something which they can prepare for themselves, and which can be administered

without fear of injury. I will mention one which is easily prepared, and which in all cases of disordered stomach or bowels, has a most salutary effect, if freely and promptly given. It is simply, peppermint herb, rhubarb, and saleratus, equal quantities, pulverized, and thoroughly mixed and put into a bottle for use. When to be used, put a tea-spoon full into a tea-cup, and fill with hot water. Sweeten with loaf sugar if you like, and take a tea-spoon full, or a swallow, as often as necessary. One or two cups will usually effect a cure.

H. L. Y.

Rural Hill, 1856.

[The above is an excellent medicine in cases of summer complaint among children. We have known many mothers who would not be without it, after they had once tested its virtues. But many consider it a great improvement to put a quantity of loaf sugar or honey with the mixture, and then fill the bottle with some of the best brandy, thus forming a kind of syrup which may be diluted if necessary.]

Enigma No. 4.

I am composed of 14 letters, my 12, 10, & 8, is the noblest of God's works; my 6, 11, 10, 5, 8, is what all farmers should raise. Erase the first letters, and you have the means of the deluge.

My 6, 5, 8, 6, 13, 11, is a root brought from the West Indies.

My 12, 7, 11, 3, 4, is one of the months of the year.

My 4, 13, 10, 11, 2, 8, 6, is one of the senses.

My 6, 11, 7, 12, 13, 14, is a useful study.

My 9, 10, 12, 13, is what authors aspire for.

My 7, 2, 14, is one of the elements.

My 3, 4, 10, 2, 11, is a very useful article of furniture.

My 3, 7, 8, 13, is a support for the aged.

My 4, 13, 5, 14, is what has been given to the Imperial throne.

My 11, 5, 3, 4, is what every man desires to be.

My 9, 5, 14, 13, is a warm friend but destructive enemy.

My 9, 7, 11, 1, is what every man should own.

My whole is a very useful book.

K. H. M.

Washington, April, 1856.

Acrostical Enigma.

I am composed of 16 letters.

My 1, 5, 15, 13, 11, 14, is a lake in Asia.

My 2, 10, 12, 2, is a lake in Ireland.

My 3, 11, 7, 10, 16, is a town in Scotland.

My 4, 2, 8, 5, is a town in Germany.

My 5, 16, 12, 11, 3, is a river in Scotland.

My 6, 15, 14, 5, 8, is a city in Italy.

My 7, 12, 3, is a river in Germany.

My 8, 5, 3, 13, 15, 16, is a city in China.

My 9, 2, 5, 10, is a cape in the United States.

My 10, 15, 1, 2, 10, 5, is a town in Italy.

My 11, 14, 1, 7, 11, is a town in Iowa.

My 12, 15, 2, 6, 2, 8, is a river in Russia.

My 13, 7, 2, 14, is a town in Denmark.

My 14, 15, 6, 11, is a city in South America.

My 15, 4, 7, 6, 5, is a river in Russia.

My 16, 5, 6, 2, 1, 15, 3, is a lake in Wisconsin.

My whole is the name of a celebrated philosopher and Statesman.

S.

Answer to Enigma No. 2.—GENERAL SCHUYLER.

Answer to Enigma No. 3.—MALTA. Answered by Mollie E. H., Little Prairie Ronde, and K. H. M. Washington.

MICHIGAN FARMER.

ROBERT F. JOHNSTONE, EDITOR.

DETROIT, MAY, 1856.

If there is any subject to which western editors should call the attention of western farmers at the present time, it is that of feeding and fattening live stock on the most economical and most systematic methods. From appearances, it may be at least suggested that the season of high prices for grain products is nearly over. It may hang on for some time yet, much depending upon the prospects presented by the growing crop. But taking it for granted that the yield will be nearly or not much below our average, it is admitted by all whose opinions are worth consulting, that a steady decline may be looked for. Already, flour which in last April sold for \$8.50 to \$9.00 per bbl, can now hardly find a purchaser at \$4.75 to \$5.25; wheat which readily bought at the same date last spring \$2.00 to \$2.25, is now hard to get rid of at \$1.00 to \$1.25 and in fact much that offers, being somewhat grown, brings but 80 to 90 cents, at our city mills. Corn also that was worth last April from 75 to 80 cents is now worth but 45 to 48 cents. These are Detroit prices, and the comparison when extended to New York, Boston and Philadelphia prices, might be still more fully exemplified, while when the British rates are compared, there are changes equally significant; for instance western flour, which readily brought 44s to 45s, per barrel, now is offered in Liverpool at 32s to 34s. Wheat which sold at 12s to 13s, per bushel now moves off slowly at 9s to 10s. Corn that sold at 45s to 46s per quarter now is unsalable at 30s. We may as well bring our minds to the actual state of things. We know that this sudden, and in many quarters, unexpected turn of the market, comes severely to many, but there are some who will suffer far more than the farmer, even. The latter however, is not one who is apt to remain quiescent under such a change. He will naturally turn his attention to the next sources of profit, and among them we think, for the farmers of Michigan, that their position renders it incumbent upon them to pay some more attention to the rearing and fattening of live stock for the eastern market. There does not appear to be a full and adequate supply. Prices of good beef cattle and fat sheep are high, and though occasionally fluctuating, they remain much higher in proportion than other articles are. So with butter and cheese, articles which are manufactured from stock. They too are higher in proportion, and seem destined to remain so, the consumption being fully equal to the supply. From this state of things, we do not hesitate to call attention at this early part of the season to the wisdom of feeding all the young stock, and preparing to save all kinds of fodder during the coming year.

It is proper to say, in justice to Mr. J. Parish and ourselves, that the charges made by Messrs. Smith and Crippin in this number, so far as it relates to the trotting challenge, published in a fly leaf of our last issue, are not just. It will be borne in mind, that the controversy between Abdallah Chief and the State Agricultural Society, and Messrs. Smith and Crippin, was commenced by an attack on Abdallah. *He was the party assailed.*

He had not only been unjustly treated by the committee, but was attacked in a grossly, unfair manner on that ground. He was called out, and after several articles on the one side and the other, the discussion was terminated by him. Communications, however, were subsequently admitted over the signatures of Messrs. Smith and Crippin and Fisk, the former containing a challenge to Abdallah Chief, and the latter involving questions of a personal consideration. To these, Mr. Parish wished to reply in our last number, but his communication coming late and the controversy having, in our judgment, gone quite far enough, it was declined. His challenge was, however, published in justice to him, in the only way it could be received, as an advertisement.

Now we do not see how Mr. Parish's challenge differs in any respect, except in his willingness to show his confidence in his own horse by a wager, from that of Messrs. Smith and Crippin. We cannot see, "that the conditions named, are such as to leave no doubt that they are made on purpose to prevent a test." To any candid mind, the objections raised by Messrs. Smith and Crippin to its fairness, apply with equal force to their own challenge to Abdallah Chief. They were not necessarily called out; all that Abdallah Chief had said was, that he was ready at all times, either with Green Mountain Morgan or any other. If they saw fit to make a *specific* challenge in return, they should not now complain that Mr. Parish retorts with an offer to risk \$1500, on the issue, which is certainly among horse men, some small test of confidence. We wish now to say that no further prolongation of the controversy will be permitted in our columns. Such articles as these could be extended *ad infinitum*. Let a fair trial on the turf, either with or without wager, settle the controversy. Messrs. Smith and Crippin have an opportunity to close it, if not in May or in September next, and we presume Mr. Parish can get Abdallah's owners to trot him without any wager pending. Whatever others may say, we know of our own knowledge, that they honestly endeavored last fall to have a trial of speed, under the auspices of the State Agricultural Society, and the business sub-committee had agreed to it, but the trial was not sanctioned by a majority of the executive committee of the Society. But after all the words which may be used in a controversy of this

kind, the true test will remain to be shown by the colts raised from the horses. Give them time, and they will speak for their sires more emphatically than anything else.

And in this connection we point to the two articles in this number, one from Mr. Hill and the other from Mr. Parish, showing the performances of the stock of these two celebrated families; these are more to the point than any challenge could possibly be.

The Crops and the Season.

We receive very favorable reports of the wheat crop from all sections of the state. The winter has passed over, the snow and frost have disappeared and seem to have left the crop in good condition. The general report is that it is backward. This is partially owing to late sowing for the purpose of avoiding the ravages of the fly as much as possible. It will be recollected also that the winter set in early with cold and rains, and, we are therefore inclined to think that the fly this spring will not be so troublesome or destructive as it was found to be last season. So far the spring has been very favorable to the winter crop. There have been no sudden heavy washing rains, the snow has gone off gradually, through the season is later than usual. Little plowing had been done up to the 25th of April. While out at Marshall, during the latter part of last month, there were but few places to be seen where the plow had been at work. Mr. S. P. Wormley had sown some oats, which he thought was the first sown in his section. The ground had been plowed last fall, and was of light loamy soil. He used the cultivator altogether to put in this piece of oats. This plan we like, as giving this grain the full benefit of the season. We predict for him a full crop, with an ordinary season. Mr. Baldwin writing to us from, Eaton, Ingham and Jackson counties, says: "The wheat crop on the ground, considering the lateness of sowing, and the poor seeding, looks very promising. Farmers did not generally put seed enough to the acre. From what I can judge, only about two thirds or three quarters of the seed sown last fall germinated; but what did sprout, looks well, is green and promising. I have seen very little winter-killed in my travels this spring."

The New Counties.

We ask a careful reading of the article descriptive of the new counties lying to the north of the Grand River Country. This section of the state is well worthy of the attention of settlers, or those who are seeking new homes; and our readers can judge for themselves how rapidly these lands must increase in value, when once railroad communication is established.

MEN AND TIMES OF THE REVOLUTION; or Memoirs of Elkannah Watson, edited by his Son, Waylow C. Watson, published by Dana & Co., New York, and for sale by Raymond & Selleck, Detroit.

The above work is one of more than ordinary interest, giving an accurate and most life-like transcript of the times, the manners, and the men of Revolutionary days. Mr. Watson was familiar with Washington, Franklin, John Adams, and, indeed, with all the distinguished men of the age in which he lived, and these memoirs are prepared from his own journal of his experiences, both in this country and in Europe, where he traveled extensively. Aside from the valuable historical facts it contains, there are many amusing scenes and incidents which give the work an exciting interest.

Mr. Watson was born in 1758, near the famous Pilgrim Rock, at Plymouth; he was a descendant of Edward Winslow, one of the Mayflower Pilgrims, and lived to the advanced age of eighty-five. He was a great friend of agricultural improvements, and his exertions to benefit that cause will make his name honored among the cultivators of the soil.

An inquirer states that there is a large pile of saw dust in his immediate vicinity which has been accumulating some fifteen years, and, which is partly rotten, and some of it quite fresh. He wishes to know if it can be made available as a fertilizer. On light sandy soil, from its capacity to attract and retain moisture, it will be found beneficial as a top dressing. On heavy soils, when mixed with them, it has a tendency to disintegrate and make them easier worked and more permeable. But one of the best uses to which saw dust can be put, is that of absorbing the liquid manure of the stables and the cow houses, and then applying it as a top dressing to grass lands intended either for hay or pasture. Saw dust contains every element which would promote the growth of plants, being itself an organic vegetable product, which only needs exposure to the influences of the atmosphere to be reduced to the earth from which it originally sprang. If any one will watch how the fibrous roots of any plant will cluster around and cling to a decaying chip which may happen to be within their reach, he will have some idea that the same substance, when reduced to saw dust, will furnish to plants, in a great degree, that nourishment, which is essential to growth. A heap of saw dust is, in our opinion, as valuable for manure as a heap of straw of the same weight.

LARGE PRODUCTIONS.—Barak Mead, of Cassopolis, writes that he has an egg laid by a hen of the common breed of barn-door fowls, which measures eight inches in circumference the long way, and seven inches and one eighth the other. There are no Asiatics around, so that he claims the hen that laid the above egg to be a native. The same writer also raised a parsnip, the past season, which was four feet in length, and ten and a half inches in circumference at the crown, and four inches in circumference two and a half feet from the crown. He had a number of others almost equal in size to the above.

WHEELER & MELICK'S HORSE-POWER AND THRESHER.—This excellent power, with its accompanying threshing machine, is offered for sale on reasonable terms. For over thirteen years this machine has been in market, and it seems to be growing on the public favor, as a useful and handy power on small and large farms.

CLOVER HAY.—An inquirer wants to know the best method of curing clover hay so that it shall not be dusty. One of the principal reasons why the clover hay is apt to be dusty, is that the clover is generally allowed to become too ripe before it is cut. And even then, instead of being cured in the lapcock, it is spread out to the influence of the sun until every leaf is crisp and ready to become an impalpable powder. Cut your clover before it is dead ripe. Cure it with as little exposure to the air as possible. When putting it in the barn give it a good dressing with salt to the amount of about half a peck to the load, and clover hay will be worth about three times the amount of the dried, dusty, brown rubbish, which is generally called hay, but is only an apology for the article.

LENAWEE COUNTY.—We perceive that delegates from the towns of Franklin, Tecumseh, Ridgeway and Raisin, held a meeting in Tecumseh, on the 12th of April, to organize "The Northern Lenawee Agricultural Society." A constitution and by-laws were adopted, and the following officers were chosen: *President*—Dr. M. A. Patterson; *Secretary*—B. L. Baxter; *Treasurer*—B. J. Bidwell; *Vice Presidents*—W. A. Hall, Tecumseh; John Richards, Raisin; F. A. Kennedy, Ridgeway; Jas. B. Wells, Franklin; *Directors*—J. G. Roberts, Tecumseh; John S. Clark, Clinton; A. J. Hunter, Franklin; Saml. Rappley, Ridgeway, Nathan Spencer, Raisin.

THE HORSE CORN PLANTER.—We call attention in this number to the certificates attached to the advertisement of the corn planter manufactured by James Andrews, of Pontiac. We have watched carefully during the past two years for some invention that would supercede it, or excel it in precision and certainty of work; but we have not yet heard of any which will do any better, or that can be used to sow plaster, ashes, guano, or any concentrated manure with the seed, in manner better than this implement. It still stands where the New York Society placed it—at the head of horse corn planters.

J. M. Bartlett, of Monroe, in a report made to the Monroe County Society, in 1864, stated that the cost of cultivating forty-two square rods of carrots, was \$8 50 cts. and that the produce was 224 bushels to the quarter of an acre. The cost of gathering and housing the crop was \$1 50 cts. per 100 bushels. The cost per bushel was therefore five cents and three mills. Mr. Bartlett estimates them worth nearly or quite as much as oats per bushel for feeding purposes. In this we do not quite agree with him; we estimate them at worth about two thirds, and in feeding them, we would allow one feed of oats per day to two of carrots.

There is no good reliable work treating on the diseases of all domestic animals. Dadd's "Horse Doctor," and his "Cattle Doctor," are very good works on the classes of animals on which they treat. There are other separate works on sheep, hogs, &c.

Another inquiry is, "Do any of our correspondents know how to fix a well so that quicksand will not flow into it with the water?" If they do, just send on the article. There is no way to shut it out with water lime unless the water is shut out of the well at the same time.

We received the advertisement of Dr. Jeffries' horse, Billy Boston, so late last month, that we had no time nor opportunity to direct the attention of farmers to the opportunity which the Doctor affords them, of improving their stock by a cross with a favorite and well-known strain of blood.

Articles in type, but crowded out of this number "New counties and Rich Lands, from the Grand Haven Times," "Stoves," "Close Dark and Damp Stables," Ottawa County Agricultural Society," "Sheep and Wool—their profits," "Meteorological."

The Market.

The market for produce continues to decline, but till navigation is thoroughly opened, it cannot be stated to what point the decline will reach. Wheat sells here at 70 to 80 cents per bushel by the wagon load. Flour of the common grades range from \$4.00 to \$5.00. Extra made from Ohio or Illinois wheat is worth \$7.00 to \$8.00. Corn has been sold for 40 cents per 30,000 bushels. This is the lowest point corn has reached in some three years in this market. Oats sell at 36 cents. Butter of good quality sells at 25 cents. Eggs at 12½ cents per dozen. Beef cattle sell at \$3.00 to \$3.50 cents live weight. Sheep now range from \$3.50 to \$5.00 per head on account of their wool. There is much enquiry about wool, but as yet there is nothing definitely known, except that the market will open from 30 to 40 cents for the range of the several grades. This being the price it has maintained throughout the season. The impression is general that there will be a quiet season with but little excitement.

MOWERS & REAPERS.

**KETCHUM'S MOWER,
AND MOWER AND REAPER COMBINED.**
MANUFACTURED BY HOWARD & CO., BUFFALO.
Price \$110 for Mower, and \$130 for Combined
Machine, Transportation added.

SEND ORDERS EARLY TO

D. O. & W. S. PENFIELD,
No. 103 Woodward Avenue, Detroit.

my 3m

FOR SALE! A RARE CHANCE FOR NURSERYMEN!

THE undersigned offers for sale his valuable real estate, situated in Port Huron, comprising fifty-one lots, located in one of the most productive, growing and healthy portions of the village, and containing about one-fourth of an acre each. Also the "Lake Huron Garden and Nursery," comprising 150,000 choice grafted fruit trees. Said property will be sold entire, or the equal undivided one-half thereof can be purchased.

TERMS.—One quarter cash, and the balance in ten equal annual payments, with interest, to be secured by mortgage on the premises.
J. SPALDING, Sen'r.
Port Huron, May, '56. 3t.

AGRICULTURAL CHEMISTRY.

EVERY Farmer in these days of progress must know something of this attractive science, and by our excellent

TEXT BOOKS,

it is so simplified as to be easily understood by the farmer and his children.

The following are the best, and will be sent by mail free of postage on receipt of price.

Jonston's Agricultural Chemistry,	\$1.25
Brown's Field Book of Manures,	1.25
Jonston's Elements of Agricultural Chemistry,	1.00
Dana's Muck Manual,	1.00
Norton's Elements of Scientific Agriculture,	60
Nash's Progressive Farmer,	60
Chemistry Made Easy,	25

C. M. SEXTON, & Co.
Agricultural Book Publishers, 140 Fulton st., N. Y.
May, 1856, 1. t.

C. P. WOODRUFF,
DEALER IN
HARDWARE,
IRON, TIN PLATES, NAILS, STOVES,
JOINERS', SHEET IRON, CARPENTERS',
COOPERS', COOKERS', BLACKSMITHS',
TOOLS, HOUSE TRIMMINGS,
FARMING IMPLEMENTS.

May, '56, 6m.

No. 73, Woodward Avenue, Detroit,

THE PREMIUM HORSE, YOUNG VICTOR,

WILL STAND FOR MARES THIS SEASON, (COMMENCING THE FIRST OF MAY.)
In Detroit and Windsor, also on the Grand River Road, about eight miles from Detroit, and a few other stands in the vicinity. For stands and terms see hand bills.

YOUNG VICTOR

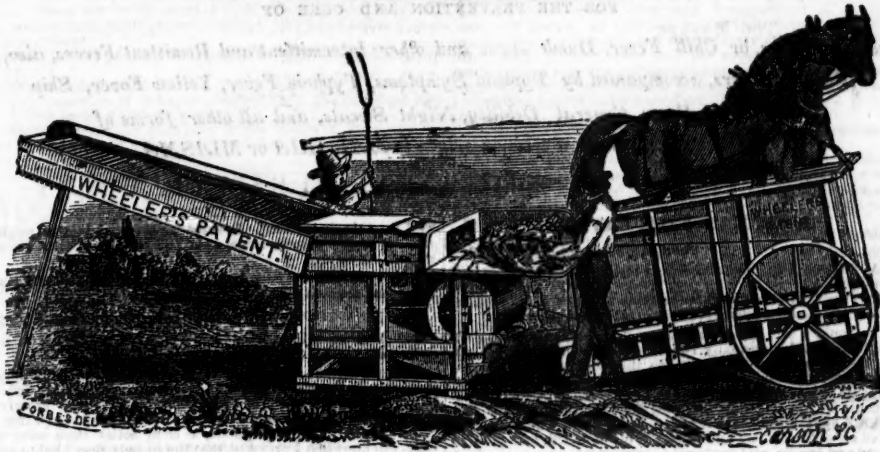
Was awarded the sweepstakes premium at the Michigan State Fair last fall, as the best horse for all work. He is a dark chestnut, rising six years old, stands 16½ hands high, weighs 1400 lbs., combining size and beauty with action to a degree that cannot be surpassed he received the premium when a foal at the County Fair of Huron, Canada West, and, again, when three years old. His colts received the first premiums at the County Fair held at Goderich, in the years 1854 and '55, one of his foals received the second premium at the Provincial Fair at London, C. W., in the year 1854, \$200 was offered for the foal.

Young Victor was sired by the celebrated imported horse Tamworth, the sire of Wild Rover and some of the best stallions in Canada. Wild Rover was awarded the President's premium of \$80 at the Provincial Fair held at Hamilton, C. W., in the year 1853; also, the first premium at London, in the year 1854. He is a horse of remarkable action, he won a trotting match last fall at London, for \$1000 a side. Tamworth by Tamworth out of Giantess, Tamworth by Teresais, by Soothsayer, by Trumpeter, by Conductor, by Matchem, by Cade, by the Godolphin Arabian. Giantess, by Diomed, Diomed out of Spectator mare, her dam (sister to Heratius), by Black Childers.—*Studbook*, 173, vol. 2. Empress, the dam of Young Victor, was sired by the thoroughbred imported horse English Hunter, imported by Col. Prince; she is a beautiful bay mare, possessing very superior action and spirit; she has been awarded at different seasons eight first premiums as a brood mare. One of her colts was awarded the first premium at the Provincial Fair at London, C. W., as the best yearling for all work. The dam of Empress was a mare of the Morgan stock, from Pennsylvania and has received several premiums as a brood mare.

May, 1856. 2t

HENRY STONEHOUSE.

NEW YORK STATE AGRICULTURAL WORKS, BY WHEELER, MELICK, & CO.



DOUBLE POWER, AND COMBINED THRESHER AND WINNOWER, IN OPERATION.

We are Manufacturers of Endless Chain, Railway Horse Powers, and Farmers' and Planters' Machinery for Horse Power use, and are owners of the Patents on, and principal makers of the following valuable Machines:

WHEELER'S PATENT SINGLE HORSE POWER, AND OVERSHOT THRESHER WITH VIBRATING SEPARATOR.

This is a One Horse Machine, adapted to the wants of medium and small grain growers. It separates grain and chaff from the straw, and threshes about 100 bushels of wheat or twice as many oats per day without changing horses—by a change, nearly double the quantity may be threshed. PRICE \$128.

WHEELER'S PATENT DOUBLE HORSE POWER, AND OVERSHOT THRESHER WITH VIBRATING SEPARATOR.

This Machine is like the preceding, but larger, and for two horses. It does double the work of the Single Machines, and is adapted to the wants of large and medium grain growers, and persons who make a business of threshing. PRICE \$160.

WHEELER'S PATENT DOUBLE HORSE POWER, AND COMBINED THRESHER AND WINNOWER.

(SHOWN IN THE CUT.)

This is also a Two Horse Machine; it threshes, separates the grain from the straw, and winnows it at one operation, at the average rate of 150 bushels of wheat, and 300 bushels of oats per day. In out-door work, and for persons who make a business of threshing, it is an unequalled Machine. PRICE \$248.

ALSO, CLOVER HULLERS, FEED CUTTERS AND SAWING MACHINES.

One Horse Powers are adapted in all respects to driving every kind of Agricultural and other Machines, that admit of being driven by Horse Power, and other Threshers may be driven by any of the ordinary kinds of Horse Power in use—either are sold separately.

To persons wishing more information and applying by mail, we will forward a circular containing such details as purchasers mostly want—and can refer to gentlemen having our machines, in every State and Territory.

Our firm have been engaged in manufacturing this class of Agricultural Machinery, twenty-two years, and have had longer, larger, and more extended and successful experience than any other House.

All our Machines are warranted to give entire satisfaction, or may be returned at the expiration of a reasonable time for trial.

Orders from any part of the United States and Territories or Canada, accompanied by satisfactory references, will be filled with promptness and fidelity. And machines securely packed, will be forwarded according to instructions, or by cheapest and best routes.

WHEELER, MELICK & Co.,
Albany, N. Y.

May, 1856, 11.

NEW PRINCIPLE: NEW REMEDY: NO POISON:

RHODES' FEVER AND AGUE CURE.

FOR THE PREVENTION AND CURE OF

Fever and Ague, or Chill Fever, Dumb Ague and other Intermittent and Remittent Fevers, also, for Billious Fevers, accompanied by Typhoid Symptoms, Typhoid Fever, Yellow Fever, Ship and Jail Fever, General Debility, Night Sweats, and all other forms of Disease, which have a common origin in MALARIA or MIASMA.

A HUMAN LIFE SAVED.

Dowagiac, Mich., March 11, 1886.

J. A. RHODES, Esq., Dear Sir:—As I took your medicine to sell on consignment, "no cure no pay," I take pleasure in stating its effects as reported to me by three brothers who live in this place, and their testimony is a fair specimen of all I have received:

W. S. Conklin told me—"I had taken nine bottles of Christie's Ague Balm, and continually run down while using it till my lungs and liver were congested to that degree that blood discharged from my mouth and bowels, so that all thought it impossible for me to live through another chill. The doctor, too, did all they could for me, but thought I must die. Nothing did me any good until I got RHODES' FEVER AND AGUE CURE, which at once relieved me of the distress and nausea at my stomach, and pain in my head and bowels, and produced a permanent cure in a short time."

H. M. Conklin says: "I had been taking medicine of as good a doctor as we have in our county, and taken any quantity of quinine and specifics without any good result, from 25th of August to 17th Dec. But seeing how nicely it operated on my brother, I got a bottle of RHODES' FEVER AND AGUE CURE, which effected a permanent cure by using two-thirds of a bottle."

S. M. Conklin was not here, but both the other brothers say his case was the same as H. M.'s. I sold the medicine to both the same day, and the cure was as speedy from the same small quantity, and I might so testify.

Yours with respect, A. HUNTINGTON.

The above speaks for itself. Good proof as it is, it is of no better tenor than the vast number of like certificates I have already published, and the still greater amount that is continually pouring in to me.

One thing more. Last year I had occasion to caution the public in these words:

"I notice one firm who have taken one of my general circulars, substituted the name of their nostrum for my medicine, and then with brazen impudence and their pamphlet with the exclamation, 'Let the proprietor of any other medicine say as much if he dares,' &c."

Now I take pleasure in saying that the extreme caution referred to the same "Dr. Christie's Ague Balm" that is mentioned in the above certificate.

There are several other industrious people who are applying to their poisonous trash all that I publish about my Fever and Ague Cure, or Antidote to Malaria, except the Certificates of Cures, and the certificate of the celebrated chemist, Dr. James R. Chilton, of N. Y., in favor of its perfectly harmless character, which is attached to every bottle. These will always serve to distinguish my medicine from imitations.

Providence, R. I.

JAS. A. RHODES, Proprietor.

TONICS WONT DO.

They never did do more than give temporary relief, and they never will. It is because they don't touch the cause of the disease. The cause of all ague and bilious diseases is the atmospheric poison called Miasma or Malaria. Neutralise this poison by its natural antidote, and all disease caused by it disappears at once. Rhodes' Fever and Ague Cure is this Antidote to Malaria, and moreover it is a perfectly harmless medicine. The certificate of the celebrated chemist, J. R. Chilton, of New York, to this effect is attached to every bottle; therefore if it does no good it can do no harm.

This is more than can be said of Quinine, Arsenic, or any tonic in existence. The moment a person takes these, his head and ears keep up a continual ringing, the sight is always affected, and the whole nervous system seems strung upon wires. Swelled heads and swollen legs are not uncommon.

No wonder this treatment "breaks up the chills," but that is all. They are liable to come on again at any moment. And where, as is usual, they are continually repeated in that manner, the countenance soon assumes that pallid, yellow, waxy look that indicates dumb ague, which never allows a person to feel perfectly

well for a single moment. In some ague districts you might as well try to find a gold mine, as a pair of red cheeks on man, woman, or child.

In illustration of these truths, I annex some extracts from a letter just received from a physician:

Georgetown, Ohio, March 17, 1886.

Jas. A. Rhodes, Esq., Dear Sir:—Yours of 2d instant is at hand, and I take pleasure in answering.

The cure arrived so late last year, that the demand for any remedy was pretty well over, and I experienced considerable difficulty in getting any one to try it. And this difficulty was greatly increased from the fact that a remedy had been introduced which was growing in favor with the public, as being better than using Quinine, not knowing, I presume, that the remedy they used to escape taking Quinine, contained the drug itself!

One difficulty was to be overcome which amounted to a prejudice with a few, which was, the remedy would invariably break an ague, but it did not cure it, as it would often return with renewed vigor. This one circumstance I deemed in your favor, if I could institute a test comparison with the remedy I allude to, (known as "Smith's Tonic,") and your Cure. The following is the result:

Three persons took your "Cure," all of which were cases of "Quotidian Intermittent Fever," of many weeks standing;—they had taken Quinine, and other remedies, occasionally missing a chill, but it was, (as in all such cases,) slowly wearing them out, and laying the foundation of other and severer maladies. I did succeed in effecting a radical cure of all three of these cases with your remedies, and they have never had a chill since. In all three of these cases the "Smith's Tonic" had been used, and would, as before stated, break the chill, but after a period or two had elapsed, it would return.

I think there will be no difficulty now in giving to your "Cure" the vantage ground of any other remedy now in use here, &c., &c., I beg to remain your obedient servant, &c.

WILLIAM BUCKNER, M. D.
JAMES A. RHODES, Proprietor.
Providence R. I.

TWENTY-EIGHT NEGROES CURED, AND A COTTON CROP SAVED.

The following unsolicited letter from a Southern gentleman and planter, is of universal interest.

Clayton, Alabama, March 13, 1886.

Dr. Rhodes, Dear Sir:—In justice to you I make this statement of facts: Your "Fever and Ague" medicine is without doubt the best article ever put forth for the Cure of that troublesome disease. On my plantation were twenty-eight cases in the month of October, mostly my cotton pickers. I tried Quinine; it had no positive effect. I began to despair of saving my cotton crop. My neighbor, Mr. John R. Miller, had tried your medicine; he told me to get it, and I immediately commenced using it; my hands took it without losing a day, and got well almost with the first dose. It worked like a charm. I never in my life have seen anything operate so sanatively. I sent to Columbus, Ga. and got a fresh supply, and shall never be without it, if I can find it in the country.

Very respectfully yours, THOMAS EFORD.

RHODES' FEVER AND AGUE CURE, OR ANTIDOTE TO MALARIA, the only harmless remedy in existence, is equally certain as a Preventive, as a "Cure." Take it when you feel the chills coming on, and you will never have a single one.

For sale by HIGBY & DICKINSON, Detroit, and by principal druggists everywhere.

Scions by Mail or Express.

THE subscriber being engaged in rearing somewhat extensive orchards of the different kinds of fruit for market and amateur purposes, most of which are now in bearing, embracing nearly all the really valuable varieties known to the pomological world; will answer *cash orders* by mail, express, or other wise, at the following rates. From two to six scions of each variety, packed in oil silk and sent by mail, ten cents each variety: One dozen scions of each, sent as ordered.

For apples and peaches, ten cents with packing and transportation:

For pears, plums, and cherries, twenty cents do do
Large quantities of the more common sorts, one dollar per hundred, with packing and charges added.

Orders can be sent any time prior to the middle of June, as scions will be kept in good order until that time. Peaches, plums, and cherries should be used early.

Flymouth, Wayne Co., Dec. 31st., 1855.

T. T. LYON. 3t

WOOL! WOOL!--CLOTH! CLOTH!

Cornwell's Factory in FULL OPERATION!

We are prepared to manufacture

20,000 POUNDS OF WOOL

Into Cloth and Flannel on the following terms:

Fulled Cloth, for..... 2s 6d per yard.

Fulled Casimere,..... 3s do

White Flannel, two yards wide,.... 3s do

do do one yard wide,.... 1s 6d do

Or we will work the Wool and give one half of the Cloth made from it. It takes about 1 1/4 lbs. of Wool for one yard of good fulled Cloth, and 3/4 lbs. of Wool for one yard of Flannel.

We have a large stock of Cloths on hand to exchange for Wool on reasonable terms. Our factory is three miles West of Ann Arbor, on the Huron River. All Wool sent by Railroad, will be promptly attended to.

Ann Arbor, April, 1856. apm CORNWELL & BROTHER.

ROGER'S WHEEL CULTIVATOR.

THE subscribers are still manufacturing ROGER'S PATENT WHEEL CULTIVATOR, and have the exclusive right of making and vending them in the counties of Calhoun, Kalamazoo, Cass, Van Buren and Berrien. This machine has taken the highest premium at the State and County Fairs wherever exhibited, and is the BEST WHEEL CULTIVATOR now in use for preparing summer fallows, covering seed, and cultivating corn. All orders filled on short notice. Price at our Foundry, \$30 each.

We also manufacture STEAM ENGINES, MILL IRONS, and agricultural implements in general use.

A. ARMS & CO. octif

Kalamazoo, Mich.

IMPROVED STOCK!

THE Subscriber, breeder of Durham Cattle, Jacks, Jennets and Mules, Southdown Sheep, and Chester White Pigs, calls attention to his stock generally, the most of which is for sale at reduced prices. Among the rest may be found four yearling Bulls, bred by Hubbard, and three superior Jacks, from three to five years old.

SETH A BUSHNELL.

Hartford, Trumbull Co., Ohio, March 24, 1856.

May 3t.

PUBLIC SALE

OF SHORTHORNS:

H Having determined to remove to Chillicothe, I will sell by auction on

Thursday, June 19th, 1856.

at my farm, Darbyville, Pickaway county, Ohio, all of my Shorthorn herd, except three Cows, a part of the yearlings part, and a part of the Calves; also a few grades. Those offered—about twenty-five head—are

COWS, HEIFERS, CALVES, and a few BULLS, including the fine imported Bull THORNBERRY, 1034, (18,222.) Of these, twenty-five or more are Herd Book cattle, and their produce—the balance are mostly full-bloods and high-grades, so called; but some of them have as good pedigree as many Herd-Book animals, and have one most important advantage, in being thoroughly acclimated. They trace back in pedigree through some of the several late importations, to an extraordinary good cow, brought to the Scioto by Wm. Patton, in 1799, which was descended from the importation of Goff and Patton in 1783, crossed on a later importation made by Mr. Miller, of Virginia.

Nearly all of this stock has been, throughout the past severe winter, without shelter, and being fed but once a day, in consequence thin in flesh.

I reserve a bid on Thornberry, but do not wish to retain him, though his get is far superior to the get of any other of the many imported bulls that I have bred to.

Pedigrees of forty-five or fifty head of them can be had by the 16th of April.

A credit to May 1st, 1857, on approved notes at interest, or a liberal deduction to purchasers wishing to pay cash.

HARNES RENICK.

Darbyville, Pickaway Co., Ohio.

May 1t.

AYER'S CATHARTIC PILLS

Operate by their powerful influence on the internal viscera to purify the blood and stimulate it to healthy action. They remove the obstructions of the stomach, bowels, liver and other organs of the body, and by restoring their irregular action to health, correct, wherever they exist, such derangements as are the first causes of disease. An extensive trial of their virtues, by Professors, Physicians, and Patients, has shown cures of dangerous diseases almost beyond belief, were they not substantiated by persons of such exalted position and character as to forbid the suspicion of an untruth. Their certificates are published in my American Almanac, which the Agents below named are pleased to furnish free to all inquiring.

Annexed we give Directions for their use in the complaints which they have been found to cure.

For COSTIVENESS.—Take one or two Pills, or such a quantity as gently move the bowels. Costiveness is frequently the aggravating cause of Piles, and the cure of one complaint is the cure of both. No person can feel well while under a costive habit of body. Hence it should be, as it can be, promptly relieved.

For DYSPEPSIA, which is sometimes the cause of Costiveness, and always unpleasant, take mild doses—from one to four—to stimulate the stomach and liver into healthy action. They will do it, and the heartburn, bodyburn and sourburn of dyspepsia will rapidly disappear. When it has gone don't forget what cured you.

For A FOUL STOMACH, or Morbid Inaction of the Bowels, which produces general depression of spirits and bad health, take from four to eight Pills at first, and smaller doses afterwards, until activity and strength is restored to the system.

For NERVOUSNESS, SICK HEADACHE, NAUSEA, Pain in the Stomach, Back and Side, take from four to eight Pills on going to bed. If they do not operate sufficiently, take more the next day until they do. These complaints will be swept out from the system. Don't wear these and their kindred disorders because your stomach is foul.

For SCORFULA, ERYTHELMA, and all Diseases of the Skin, take the Pills freely and frequently, to keep the bowels open. The eruptions will generally begin to diminish and disappear. Many dreadful ulcers and sores have been healed up by the purging and purifying effect of these Pills, and some disgusting diseases which seemed to satiate the whole system, have completely yielded to their influence, leaving the sufferer in perfect health. Patients! your duty to society forbids that you should parade yourselves around the world covered with pimples, blotches, ulcers, sores, and all or any of the unclean diseases of the skin, because your system wants cleansing.

RHEUMATISM, GOUT, and all Inflammatory Fevers are rapidly cured by the purifying effects of these Pills upon the blood, and the stimulus they afford to the vital principle of life. For these and all kindred complaints, they should be taken in mild doses, to move the bowels gently, but freely.

As a DINNER PILL, this is both agreeable and useful. No Pill can be made more pleasant to take, and certainly none has been made more effectual to the purpose for which a dinner pill is employed.

J. C. AYER,

PRACTICAL AND ANALYTICAL CHEMIST
LOWELL, MASS.

AYER'S CHERRY PECTORAL,

For the Rapid Cure of

Coughs, Colds, Hoarseness, Bronchitis, Whooping-Cough, Croup, Asthma and Consumption.

This remedy has won for itself such notoriety for its cure of every variety of Pulmonary disease, that it is entirely unnecessary to recount the evidences of its virtues in any community where it has been employed. So wide is the field of its usefulness, and so numerous the cases of its cures, that almost every section of the country abounds in persons publicly known, who have been restored, from alarming, and even desperate diseases of the lungs, by its use. When once tried, its superiority over every other medicine of its kind, is too apparent to escape observation, and where its virtues are known, the public no longer hesitate what antidote to employ for the distressing and dangerous affections of the pulmonary organs which are incident to our climate. And not only in formidable attacks upon the lungs, but for the milder varieties of COLDS, HOARSENESS, &c.; and for CHILDREN it is the pleasantest and safest medicine that can be obtained.

As it has long been in constant use throughout this section, we need not do more than assure the people its quality is kept up to the best that it ever has been, and that the genuine article is sold by

J. S. FARRAND, Detroit.

F. Eckstein Jr., Cincinnati, Ohio; J. H. Reed and Co., Chicago; C. West and Co., Toledo, Ohio; Welden and Rhodes, Sandusky, Ohio; Wm. Fiske, Cleveland, Ohio.

1856.

HICKOCK'S IMPROVED CIDER MILLS.

THESE MILLS are now made with Iron Cylinders and are warranted in the most positive manner—will make from six to ten barrels of cider per day. Price, \$45.

Also, Emery & Pease's make of Mills.

my 3m

D. O. & W. S. PENFIELD.

A. GILMORE'S PATENT BEE HOUSE AND HIVE: PATENTED JUNE 5TH, 1849.

THE subscriber having purchased the right of GILMORE'S BEE HOUSE AND HIVE for the counties of

WAYNE, OAKLAND, AND MACOMB,

is now prepared to sell

INDIVIDUAL RIGHTS

with a book of instructions for building House and Hive, and the management of bees, for five dollars.

A liberal discount to clubs for town rights.

The plates and descriptions are plain, giving the length, width, and thickness of each piece of timber, so that any carpenter can build the house and hive from the book. With this Bee House and Hive, any individual can have the bees perfectly under his control, and obtain the surplus honey without the destruction of the bees.

A. M. BODWELL.

Ann Arbor, March 20, 1856.

N. B. Agents wanted for selling rights in every town in the above counties.

April, if

BILLY BOSTON

WILL STAND FOR MARES

the coming season, at the stable of Chas. A. Jeffries, in the township of Dexter, Washtenaw county. Terms \$15.00 to insure a foal. Billy Boston is a thorough bred horse of superior style, action and endurance. He was sired by Old "Boston," the sire of the celebrated Horse Lexington, and is as good blood as any Horse in America.

Good pasturage furnished for mares from a distance, on reasonable terms.

Dexter, Washtenaw Co., Mich.

CHAS. A. JEFFRIES.
April.

FRUIT TREES

FOR SALE AT THE

Jonesville South Nursery.

Jonesville, Michigan.

I have a few thousand PEACH TREES, one year from the bud, 1 adding varieties, 8-10, from two to six feet high. A few thousand APPLE TREES, hardy GRAPEs, &c. The apples include most of the choice varieties cultivated; from three to four years old, and propagated from well-known bearing trees. All fruit trees warranted true to the label.

Also fifty thousand OSAGE ORANGE shrubs two years old, extra fine.

Standard prices at the nursery, and 25 per cent. additional when delivered.

JOHN T. BLOIS.
Jan. 1 '56-57

MERRILL, POWERS & CO.,

MANUFACTURERS OF

Stone Pipe for Conducting Water, Gas, Sewerage, &c.

THE above Pipe is manufactured from a superior article of Pottery Clay, glazed upon the inside with an extra superior article of pure clay. (Which in the process of burning forms a coat of pure glass.) Is then burned so that it is harder than the hardest granite rock, will conduct water miles and discharge itself just as pure as when it leaves the spring, neither earth, water, gas, frost, or acids, of any kind have any effect upon it whatever; will stand a pressure of at least 500 feet head. It is made in joints of about 25 inches in length, with a tenon on one end, and a socket on the other; is laid in a good article of water lime cement, which becomes stone of itself after remaining in the ground say 30 days.—Below we give prices per rod at the factory.

For 1 inch calibre

" 1 1/4 "	1.25
" 1 3/4 "	1.50
" 2 "	2.00
" 2 1/2 "	2.50
" 3 "	3.00
" 4 "	4.00

All orders or communications in relation to the above pipe addressed to AKRON, or MIDDLEBURY, Summit Co., Ohio, will receive prompt attention.

Middlebury, Summit Co., Ohio, Aug. 8 '55.

[sept. 1]

OSIER WILLOW.

THE subscriber has for sale cuttings of Osier Willow, at \$10 per thousand. They will be packed and delivered at Coldwater, Mich., directed as desired.

Also Cranberry Vines, in large and small quantities to suit purchasers.

Price 25 cts. per square foot.
Coldwater, Feb. 18, 1856.

L. D. HALSTED.
March, '56, St

D. O. & W. S. PENFIELD, PLOWs, DRILLS AND HARROWS.

WE are now prepared to furnish the farmers and merchants of this State with any and the best Agricultural Tools brought to this market, and in any quantity, having the most complete stock in the west, amongst which may be found: Starbuck Plows, Trojan do; Huggies, Nourse & Mason's do; Geddies' Harrow, and all other kinds of do; Seymour's Cultivators and Seed Drills; Emery's do; Hand Seed Drills, Garden Drills, Peckham's Cultivator; Cramer's do; Flower's do; Ketchum's Mower and Reaper; Seymour & Morgan's do; also, a full assortment of Hoes, Forks and Rakes. A full assortment of Agricultural Tools.

Orders from the country promptly attended to.

103 Woodward avenue, Detroit, M.

Feb '56. [5m]

SEEDS, SEEDS, SEEDS!

D. O. & W. S. PENFIELD are receiving their spring and summer assortment of Field and Garden Seeds, among which the following may be found:

Clover,	Foul Meadow,	Australian Wheat,
Timothy,	Millet,	Rye,
Red Top,	Tuscan Wheat,	Poland Oats,

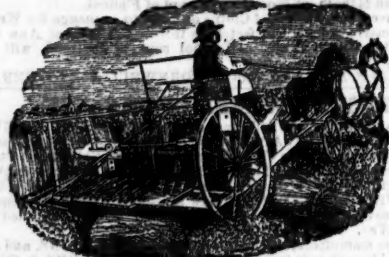
Buckwheat, and a choice selection of Seed Potatoes. A full assortment of Shaker Garden Seeds, warranted fresh and the best in the market.

103, Woodward ave., Detroit. Feb. '56 [5m]

ATKINS' AUTOMATON:

OR

SELF-RAKING REAPER AND MOWER, THE BEST MACHINE IN USE.



1 (the first) used in 1852.

40 used successfully in 1853.

300 in twenty different States in 1854.

1200 in all parts of the Union in 1855.

3000 building for the harvest of 1856.

THERE ARE SIX GOOD REASONS FOR THIS unparalleled increase and great popularity: 1st. It is strong and reliable, and easily managed. 2d. It saves the hard labor of raking. 3d. It saves at least another hand in Binding. 4th. It saves shattering, by the careful handling in raking; besides, the straw being laid straight, it is well secured in the sheaf, and does not drop in the after handling, and the heads are not exposed in the stack, so that the grain saving even exceeds the labor saving. 5th. It is a good Mower, being one of the best convertible machines in use. 6th. It has a knife that does not choke.

Its other excellencies, too numerous to mention here, are fairly given in the circulars. Its intrinsic worth is also attested by the award (mostly in only 3 years), of

OVER 70 FIRST PREMIUMS!

PRICE—REAPER AND MOWER, \$200—\$75 on its receipt, \$75 first September, and \$50 first December. Price of SELF-RAKING REAPER, only \$175. Considerable saving in freight to those at a distance, who order prior to 1st March; also, liberal discount for advance payment.

To secure a Machine, order immediately. Though so little known the past season, and none ready for delivery till 1st May, yet not two-thirds the customers could be supplied. The reputation of this Machine is now widely established, so that THREE THOUSAND will not as nearly supply the demand as twelve hundred did last year, and we shall also be selling four months earlier.

Order early, if you would not be disappointed. PAMPHLETS, giving IMPARTIALLY the OPINIONS OF FARMERS, together with orders, notes, &c., mailed to applicants, and prepaid.

Write to us at CHICAGO, (Ill.), DAYTON, (Ohio), or BALTIMORE, (Md.), which ever is nearest to you.

J. S. WRIGHT & CO.

"Prairie Farmer" Works, Chicago, Dec. 1, 1855. ap4m

PURE BRED STOCK FOR SALE.

THOROUGH BRED DURHAM CATTLE, Pure Bred French Sheep, Pure Bred Spanish Sheep, and Pure Bred Essex Pigs and Suffolk Pigs. Apply to J. S. GOE, Tippecanoe, Fayette Co., Pa., 4 1/2 miles East of Brownsville. April, 1856. ap 1y